Compressed Air Technologies.
Built to Deliver Value.

CHAMPION

June 2025

ChampionAirtech.com

CHAMPION MANUFACTURING STANDARDS

With more than 55 years of screw compressor experience, Champion delivers crucial know-how and a passion for excellence. To provide quality processes and performance at the highest level possible, we focus on five main areas:

The Process: The manufacturing process for every compressor includes thirty quality checks before the testing procedure begins. All quality checks are based on customer expectations and requirements to ensure a perfect assembly process.

Performance Testing: All compressors pass through accurate performance test procedures to ensure assembly accuracy, meeting and exceeding compliance with ISO 1217 Flow Rate and IEC 60204 for electric equipment.

Traceability: All performance and critical component parameters are captured during the performance test and stored in a dedicated database. This information allows us to create compressor ID test reports that are always available for any customer requests – the database has delivered performance and critical components traceability since 2014.

Exceptional Attention to Detail: After testing, every compressor must pass a final inspection where dedicated operators clean, remove imperfections, and check against approved specifications.

Availability & Prompt Delivery: To keep production at the required levels, the Lonate Pozzolo plant operates a mixed-model compressor assembly line, with 600 sqm of warehousing dedicated exclusively to finished goods.

Champion is certified to ISO 9001, ISO 14001 and ISO 45001 to grant the European standard on Quality, Health and Safety SO process.

5 Year Extended Warranty

The Champion free-of-charge 5 year extended warranty* speaks volumes about the quality of our products and gives you total peace of mind. Our warranty and service plans provide the most cost-effective solution and quality results, while you focus on your core business and let us take care of your compressed air system. Helping to decrease unplanned downtime and costly production interruptions, our warranty and service plans keep your system performing at its peak and delivers total peace of mind.

You really can depend on Champion.

*See Terms & Conditions for full details.

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SCREW COMPRESSORS 2.2 - 132KW

- Oil flooded
- Single stage rotary screw compressor
- Fixed and variable speed models
- Star / Delta starting
- Pressure range 5 - 13 bar
- Electric motor 2.2kW to 132kW - IE3
- Modular design including receivers and dryers
- C-PRO 1.0+, C-PRO 2.0 & Pilot TS
- Extended warranties as standard


CHAMPION
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At a glance...

Nominal Pressure
10 bar g

Motor Power
2.2 - 7.5kW

Volume Flow
0.18 - 0.9 m³/min

SMART COMPRESSOR DESIGN
FM SERIES

Well known in the industry for quality and reliability, Champion continuously develops the FM Series to achieve cutting edge performance and efficiency.

The FM02-FM06 range of lubricated screw compressors comprises of many different models and versions to allow maximum flexibility.

Engineering excellence

Compressors are more than just a financial investment, they are a key component in ensuring that manufacturers, processors and operators receive consistent, high quality low cost air. The screw compression element is the heart of the compressor and therefore Champion keeps the design and manufacture in-house, using the latest CNC rotor grinding machinery, coupled with online laser technology.

The resulting reliability and performance ensure that operating costs will remain low throughout the compressor's life.

Engineered for total piece of mind

Thanks to the user-friendly design, these compressors are easy to use, easy to install and fully ready for plug and play. Designed with a minimum number of moving parts, the compressors are very reliable, robust and capable to run continuously. The new canopy design of the compressors guarantees a quick and easy maintenance, minimising the downtime and maximising the reliability.

Maximum flexibility

Based on the individual customer requirements the compressors can be combined with different options to provide everything from a stand alone compressor to the complete airstation.

The options include:

Compressor base mounted

Receiver mounted compressor

Complete airstation including compressor, dryer and receiver

New C-Pro1.0+ User-friendly control system

The new compressor controller C-Pro1.0+ is equipped as standard for all models and provides information about pressure, oil temperature and compressor status (load/unload) together in one display and offers many useful features, such as:

- Communication port RS485 supporting Modbus
- Integrated sequencer for easy control for 2 compressors
- Plastic box for higher IP protection degree
- Auto restart after black-out
- Password protection
- Air and oil filter replacement
- Separator filter replacement and oil change
- Pressure setting easily adjustable
- Unload timer for both DOL & SDS

Optional equipment

- Receivers available at 270lt and 500lt for FM04-FM06
- Prefilter and microfilter combination
- Timed or float drains for receiver mounted units and airstation

flexiDryA

Compact & Flexible

Reliable electric motor

IP55, F-class insulation, IE3 class

Safety devices for

- Motor over temperature
- Compressor over temperature
- Airend rotation

Receiver mounted

High quality receiver built to EN87/404 (AD2000)

Airstation

Equipped with high performance dryer featuring intelligent control system for low pressure losses.

- Pressure dew point +3°C (ISO 7183, A)
- Environmentally friendly refrigerant R134a
- Digital controller displaying:
  - Dew point indication
  - Additional energy saving mode
  - Maintenance display
  - Fault memory

Small footprint

The compressor itself requires a minimum floor space of only 62 x 60 cm, with the receiver mounted models being exceptionally space-saving.

4 - 7.5kW extended features

- Star Delta starter is included as standard from 4 up to 7.5kW
- 5.5 + 7.5 kW variants have an optional after cooler available to optimise air quality and minimise the size of downstream needed

CHR series refrigeration air dryers

The advanced design and innovative technology offered by CHR Series refrigeration dryers provides an optimised performance alongside a more efficient mode of management. The electronic controller, complete with user-friendly interface, has been simplified to focus on the essential functions of operation and regulation, including the unique fan control (CHR6 – CHR167).

Simplicity in design, unrivalled reliability, and extraordinary value for money are the core strengths of this new family of units.

Maintenance is as easy as ever

Fast and easy service

These compressors are designed to ensure easy access to maintenance points. All cabinet panels can be easily removed to allow full access to all service points. Also, the limited number of moving parts reduces service costs.

Technical data
FM 2–6 Series: Screw Compressors

Design: Oil flooded, single stage rotary screw compressor, belt drive, direct start or star / delta starting
Pressure Range: 10 bar
Electric motor: 2.2 to 7.5kW – IE3

FM SERIES	TYPE	FM2 230V	FM2	FM3	FM4	FM5	FM6SDS
CODE		RSCCP020601	RSCCP020602	RSCCP020603	RSCCP020604	RSCCP020605	RSCCP020608
Maximum pressure	bar	10	10	10	10	10	10
Capacity at maximum pressure	m^3/min	0.18	0.21	0.35	0.45	0.66	0.92
Drive motor IP 55 / class F – IE3	kW	2.2	2.2	3	4	5.5	7.5
Operating voltage, 50Hz, 60Hz	400V	–	·	·	·	·	·
C-Pro 1.0+ electronic controller		·	·	·	·	·	·
Noise level	dB(A)	63	63	64	67	68	70
Air cooled		·	·	·	·	·	·
Weight	kg	151	151	151	154	168	174
Dimensions [L x W x H]	mm	622 x 599 x 1106					
Outlet connection		½"	½"	½"	½"	½"	½"
STD. COMPRESSOR SDS							
Code		–	–	–	RSCCP020606	RSCCP020607	–
SDS Starter		–	–	–	·	·	–
Noise level	dB(A)	–	–	–	70	68	–
COMPRESSOR MOUNTED ON 270 LT TANK							
Code		**RSCCP020610**	**RSCCP020611**	**RSCCP020612**	**RSCCP020613**	**RSCCP020614**	–
Weight	kg	242	242	242	245	258	–
Dimensions [L x W x H]	mm			1539 x 720 x 1604			–
COMPRESSOR MOUNTED ON 270 LT TANK SDS							
Code		–	–	–	**RSCCP020615**	**RSCCP020616**	**RSCCP020617**
Weight	kg	–	–	–	245	258	264
Dimensions [L x W x H]	mm	–	–	–		1539 x 720 x 1604	
COMPRESSOR MOUNTED ON 500 LT TANK							
Code		–	–	–	**RSCCP020620**	**RSCCP020621**	–
Weight	kg	–	–	–	314	318	–
Dimensions [L x W x H]	mm	–	–	–	1885 x 720 x 1700		–
COMPRESSOR MOUNTED ON 500 LT TANK SDS							
Code		–	–	–	**RSCCP020622**	**RSCCP020623**	**RSCCP020624**
Weight	kg	–	–	–	314	318	334
Dimensions [L x W x H]	mm	–	–	–		1885 x 720 x 1700	
PACKAGE VERSION, FM / CT / 270							
Code		**RSCCP020630**	**RSCCP020631**	**RSCCP020632**	**RSCCP020633**	**RSCCP020634**	–
Weight	kg	261	261	261	270	284	–
Dimensions [L x W x H]	mm			1539 x 720 x 1604			–
PACKAGE VERSION, FM / CT / 270 / SDS							
Code		–	–	–	**RSCCP020635**	**RSCCP020636**	**RSCCP020637**
Weight	kg	–	–	–	270	284	290
Dimensions [L x W x H]	mm	–	–	–		1539 x 720 x 1604	
PACKAGE VERSION, FM / CT / 500							
Code		–	–	–	**RSCCP020640**	**RSCCP020641**	–
Weight	kg	–	–	–	339	353	–
Dimensions [L x W x H]	mm	–	–	–	1885 x 720 x 1700		–
PACKAGE VERSION, FM / CT / 500 / SDS							
Code		–	–	–	**RSCCP020642**	**RSCCP020643**	**RSCCP020644**
Weight	kg	–	–	–	339	353	359
Dimensions [L x W x H]	mm	–	–	–		1885 x 720 x 1700	

OPTIONAL	
Alternative Voltage 230/3/50-60Hz	CONFIG_FO_F1_230_VOLT
Alternative Voltage 380/3/60Hz	CONFIG_FO-F4_380_VOLT
Factory Fitted Filter Kit including By-Pass 2.2-3 kW	CONFIG_FO_FILT1
Factory Fitted Filter Kit including By-Pass 4-5.5 kW	CONFIG_FO_FILT2
Factory Fitted Filter Kit including By-Pass 7.5 kW	CONFIG_FO_FILT3
Retro Fit Filter Pack with By-Pass 2.2-3 kW	**CC1219584**
Retro Fit Filter Pack with By-Pass 4-5.5 kW	**CC1219585**
Retro Fit Filter Pack with By-Pass 7.5 kW	**CC1219586**
Factory Fitted Automatic Drain (only with factory fitted filter option)	CONFIG_FO_F2_DRAIN
Factory Fitted After Cooler	CONFIG_FO_COOLER
AD2000 (internal separator vessel)	CONFIG_FO-F4_AD2000
Factory Fitted Food Grade Oil	CONFIG_FO_FOODGRADE

SERVICE KITS	
Service Kit FM2-6 2000 Hrs	**CC1219905**
Service Kit FM2-6 4000 Hrs	**CC1219906**
Service Kit FM2-4 8000 Hrs	**CC1224708**
Service Kit FM5-6 8000 Hrs	**CC1219907**
ChampLube Screw Lubricant 4 Ltr (x4)	**CC1180019**

For models with After Cooler option add 5kg to the weight.

* Service intervals are on calendar months or operating hours, whichever occurs first. Please see pages 88-98 for more details

At a glance...

Nominal Pressure
5 - 13 bar g

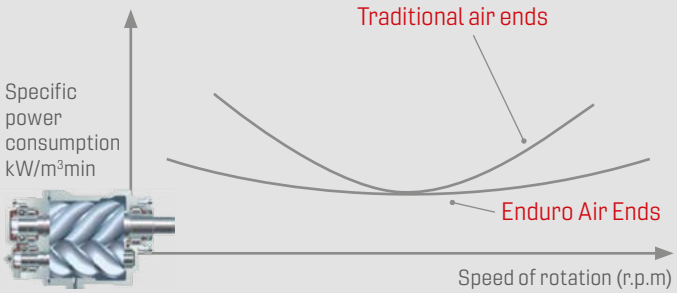
Motor Power
7 - 22kW

Volume Flow
0.45 - 3.50 m³/min

COMPACT & RELIABLE ROTARY SCREW COMPRESSORS - **FM SERIES**

FM & FM RS Screw Compressors up to 45°C ambient temperature

The generously sized ventilation system ensures optimum cooling, low outlet air temperatures best performance and reliability under harshest conditions



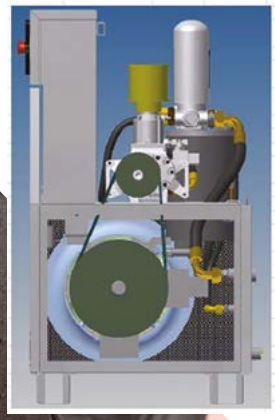
Premium Quality Airends

FM series feature high quality airends manufactured using state of the art manufacturing techniques. The airends are designed with focus on reliability and efficiency. The rotors are accurate and thoroughly checked and measured by a computerised control system. Enduro airends have a flat specific power consumption curve, which enables efficient use of the airend in wide rpm. For models FM15-22 the Tamrotor Enduro airend features integrated air - oil separator and oil filter which offers a very compact design and improved maintenance.

FM & FM RS package compressors with dryer and tank

Based up on the individual customer requirements the compressors can be combined with different options to provide options from a stand alone compressor to the complete package.

- Compressor base mounted
- Tank mounted compressor
- Complete package including compressor, dryer and tank



Easy maintenance

FM compressors are designed to ensure easy access to maintenance points. Panels on the structure can be easily removed to allow full access to all service points. Also, the limited number of moving parts reduces service costs.

The automate tensioning of the belt assures long life of the belt, less maintenance and noise reduction.

Easy Installation at the point of use

Compact design with a footprint of 0,4 m^2 for Frame 1 and 0.5m^2 for Frame 2; FM series offer one of the most compact air compressors in the market. FM innovative design also features low noise level allowing installation at the point of use.

High Efficient Motors

- ✓ International efficiency class 2 (IE3) as a standard.
- ✓ IP 55 enclosure
- ✓ Full performance up to 46°C ambient temperature

NEW FM22+ "HIGH FLOW"
FIXED & VARIABLE SPEED SCREW COMPRESSORS

At a glance...

Nominal Pressure
7, 8 & 10 bar

Motor Power
22kW

Volume Flow
3.40 - 3.79 m^3/min

The new addition FM22+ and FM22+RS models add up to a 10% increased flow rate (FAD) on top of what was already a high-performance Series.

These compact rotary screw compressors deliver fixed or variable speed operation with the best performance and reliability under the harshest conditions.

Fitted as standard with high-efficiency class 2 (IE3) motors and IP55 enclosures, they offer one of the smallest footprints on the market today. Available as stand-alone, tank mounted (500 litres), or tank mounted with dryer, the flexible design of these compressors is further enhanced with multiple options available.

The flexible and innovative design also ensures easy, low-cost installation (and maintenance) at the point of use, with automatic belt tensioning delivering long belt life, less maintenance and significant noise reduction.

FM RS

flexiAIR Variable Speed Technology

= Energy savings and lower CO_2 emissions into the environment.

The variable speed compressor: One smart solution

Variable speed compressors can efficiently and reliably handle the varying air demand found in most plant air systems. These compressors speed up and slow down to match air supply to air demand as it fluctuates. The right variable speed compressor in the right application delivers significant energy savings and a stable, consistent air supply.

Compressor energy cost example

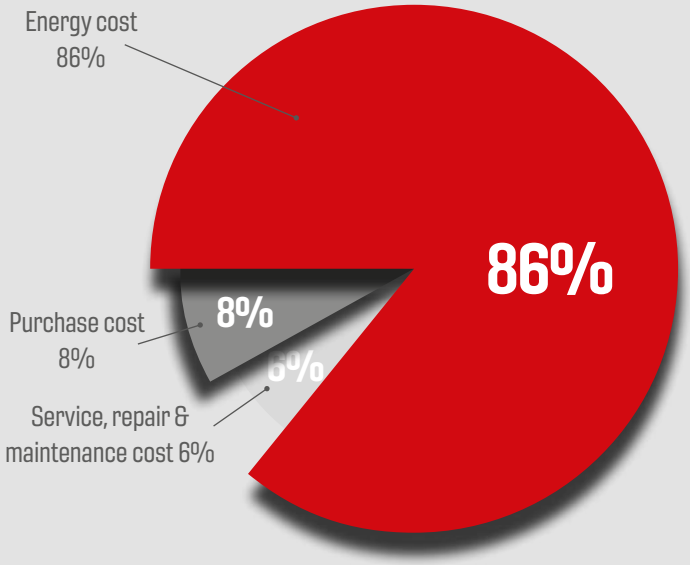
NOMINAL kW	OPERATING COST PER YEAR (5000 HOURS) AT COST PER KWH (€)					
	0.06	0.08	0.10	0.12	0.14	0.16
15	4,495	5,990	7,490	8,985	10,483	11,980
18	5,540	7,390	9,235	11,080	12,930	14,775
22	6,590	8,785	10,980	13,180	15,375	17,570

Note: Hours of operation based on two 8hrs-shifts, 6 days per week. Calculations based on nominal kW.

effiDRIVE IES2 COMPLIANT

FM-RS Series features Power Drive Systems that exceed the class **IES2 EN61800-9** requirements and assure high efficiency and high energy savings levels.

Cost of compressed air over 5 years



FM RS flexiAIR Variable Speed Technology

Allows substantial energy savings of at least 25% of the energy cost

FM package compressors

with dryer, filters and tank

The FM Package compressors can be easily and rapidly installed in any installation.

The intelligent C-PRO 2.0 controller

Simplicity

The C-PRO 2.0 controller was designed to make the operators' interface with the variable speed drive transparent. This new generation controller features extra functions for variable speed compressors like drive status display and flexible PID setting according the application. You don't need to be an expert on variable speed drives to operate your compressor. The controller takes care of the details and automatically adjusts the compressor performance to meet your changing air system demands - saving you energy. Changing the discharge pressure is as easy as pressing a button.

ELITE SERIES
THE COMPLETE PACKAGE

At a glance...

Nominal Pressure
10 bar

Motor Power
7.5 & 11kW

Volume Flow
0.97 - 1.39 m³/min

The Champion ELITE Series is a true "plug & play" compressed air station providing clean, dry air from a complete package.

The **ELITE Series** includes a rotary screw compressor mounted onto a horizontal tank, refrigerated dryer, filtration pack, automatic condensate drain and an oil/water separator.

For total peace of mind, all essential components including a serviceable oil/water separator have been assembled into a single unit. Not only do you save on space and installation costs, but you don't need to worry about the responsible disposal of oil contaminated condensate either.

Available with either a 7.5kW or 11kW efficient IE3 motor and new C-Pro-2 electronic controller as standard, these rotary screw compressors packages offer a pressure rating of 10 bar on a 270 litre horizontal receiver. Both models are designed with a focus on reliability and efficiency and are built around the high quality air ends designed and manufactured in-house in Finland. Panels can be easily removed for access to all service parts ensuring ease of maintenance.

ELITE – "plug & play" simplicity from Champion.

CHR Series Refrigerated Dryer

- Optimised performance and efficient mode of management
- User-friendly electronic controller
- Separate power supply
- Simplicity in design and unrivalled reliability

Oil/Water Separator

- Environmental friendly disposal of condensate – complying with local environmental laws
- Multi-stage separation
- Exceptional performance and trouble free operation
- Fully serviceable

CHF Filter Package

- CHF Cyclonic Separator – water and liquid oil removal
- CHF Grade M Filter – particulate to 0.1 microns and oil aerosol to 0.03mg/m³
- CHF Grade S Filter – particulate to 0.01 microns and oil aerosol to 0.01mg/m³

Condensate Drains

- Reliable drain system
- Robust and designed for long life industrial applications
- Direct acting valve construction with large orifice
- Stainless steel moving parts offering an extended life guarantee

Technical data

FM 7 Series: Screw Compressors

Design: Oil flooded, Single stage rotary screw compressor, belt drive, air cooled
Pressure Range: 7-8-10-13 bar
Electric motor: 7.5 kW - IE3

FM SERIES	TYPE	FM7			
CODE		CC1184130	CC1184131	CC1183626	CC1184132
Maximum pressure	bar	7	8	10	13
Capacity at maximum pressure	m^3/min	1.14	0.99	0.97	0.80
Drive motor IP 55 / class F – IE3	kW	7.5	7.5	7.5	7.5
Operating Voltage, 50Hz	400 V	·	·	·	·
Control voltage	24 V	·	·	·	·
C-Pro 2.0 electronic controller		·	·	·	·
Noise Level	db(A)	70	70	70	70
After-cooler		·	·	·	·
Weight	kg	205	205	205	205
Dimensions (LxWxH)	mm	667x630x1050	667x630x1050	667x630x1050	667x630x1050
Outlet connection EN 10266 (DIN 2999)		3/4"	3/4"	3/4"	3/4"
COMPRESSOR MOUNTED ON 270 LT TANK					
Code		**RSCCP0709**	**RSCCP0710**	**RSCCP0711**	**RSCCP0712**
Weight	kg	300	300	300	300
Dimensions (LxWxH)	mm	1600x700x1600	1600x700x1600	1600x700x1600	1600x700x1600
COMPRESSOR MOUNTED ON 500 LT TANK					
Code		**RSCCP0713**	**RSCCP0714**	**RSCCP0715**	**RSCCP0716**
Weight	kg	365	365	365	365
Dimensions (LxWxH)	mm	2000x700x1700	2000x700x1700	2000x700x1700	2000x700x1700
PACKAGE VERSION, FM / CT / 270					
Code		**RSCCP0725V4**	**RSCCP0726V4**	**RSCCP0727V4**	**RSCCP0728V4**
Weight	kg	340	340	340	340
Dimensions (LxWxH)	mm	1600x700x1600	1600x700x1600	1600x700x1600	1600x700x1600
PACKAGE VERSION, FM / CT / 500					
Code		**RSCCP0729V4**	**RSCCP0730V4**	**RSCCP0731V4**	**RSCCP0732V4**
Weight	kg	405	405	405	405
Dimensions (LxWxH)	mm	2000x700x1700	2000x700x1700	2000x700x1700	2000x700x1700

OPTIONAL	
Alternative Voltage, 230V / 50-60 Hz	**CONFIG_F0_F1_230_VOLT**
Alternative Voltage, 380V / 60 Hz	**CONFIG_F0-F4_380_VOLT**
Factory Fitted Filter Kit including By-Pass 7.5 kW	**CONFIG_F1_FILT1**
Factory Fitted Filter Kit including By-Pass 11 kW	**CONFIG_F1_FILT2**
Retro Filter Kit including By-Pass 7.5 kW for 270 Litre Receiver	**CC1219375**
Retro Filter Kit including By-Pass 7.5 kW for 500 Litre Receiver	**CC1219376**
Factory Fitted Automatic Drain	**CONFIG_F0_F2_DRAIN**
AD2000 (internal separator vessel)	**CONFIG_F0-F4_AD2000**
Factory Fitted Food Grade Oil	**CONFIG_F1_FOODGRADE**
SERVICE & PARTS	
Service Kits 2000 hrs FM07-11 Fixed & RS	**CC1221491**
Service Kit FM07-11 4000 Hrs	**CC1180671**
Service Kit FM07-11 8000 Hrs	**CC1180677**
ChampLube Screw Comp. Lubr. n.4 x 4 L	**CC1180019**

* Service intervals are on calendar months or operating hours, whichever occurs first. Please see pages 88-98 for more details.

FM 11 Series: Screw Compressors

Design: Oil flooded, Single stage rotary screw compressor, belt drive, air cooled
Pressure Range: 7 to 13 bar
Electric motor: 11 kW - IE3

FM SERIES	TYPE	FM11			
CODE		CC1184133	CC1184154	CC1183627	CC1184155
Maximum pressure	bar	7	8	10	13
Capacity at maximum pressure	m³/min	1.59	1.58	1.39	1.14
Drive motor IP 55 / class F – IE3	kW	11	11	11	11
Operating Voltage, 50Hz	400 V	·	·	·	·
Control voltage	24 V	·	·	·	·
C-Pro 2.0 electronic controller		·	·	·	·
Noise Level	db(A)	70	70	70	70
After-cooler		·	·	·	·
Weight	kg	219	219	219	219
Dimensions (LxWxH)	mm	667x630x1050	667x630x1050	667x630x1050	667x630x1050
Outlet connection EN 10266 (DIN 2999)		3/4"	3/4"	3/4"	3/4"
COMPRESSOR MOUNTED ON 270 LT TANK					
Code		**RSCCP1109**	**RSCCP1110**	**RSCCP1111**	**RSCCP1112**
Weight	kg	314	314	314	314
Dimensions (LxWxH)	mm	1600x700x1600	1600x700x1600	1600x700x1600	1600x700x1600
COMPRESSOR MOUNTED ON 500 LT TANK					
Code		**RSCCP1113**	**RSCCP1114**	**RSCCP1115**	**RSCCP1116**
Weight	kg	379	379	379	379
Dimensions (LxWxH)	mm	2000x700x1700	2000x700x1700	2000x700x1700	2000x700x1700
PACKAGE VERSION, FM / CT / 270					
Code		**RSCCP1125V4**	**RSCCP1126V4**	**RSCCP1127V4**	**RSCCP1128V4**
Weight	kg	354	354	354	354
Dimensions (LxWxH)	mm	1600x700x1600	1600x700x1600	1600x700x1600	1600x700x1600
PACKAGE VERSION, FM / CT / 500					
Code		**RSCCP1129V4**	**RSCCP1130V4**	**RSCCP1131V4**	**RSCCP1132V4**
Weight	kg	419	419	419	419
Dimensions (LxWxH)	mm	2000x700x1700	2000x700x1700	2000x700x1700	2000x700x1700

OPTIONAL	
Alternative Voltage, 230V / 50-60 Hz	**CONFIG_F0_F1_230_VOLT**
Alternative Voltage, 380V / 60 Hz	**CONFIG_F0-F4_380_VOLT**
Factory Fitted Filter Kit including By-Pass 7.5 kW	**CONFIG_F1_FILT1**
Factory Fitted Filter Kit including By-Pass 11 kW	**CONFIG_F1_FILT2**
Retro Filter Kit including By-Pass 11 kW for 270 Litre Receiver	**CC1220830**
Retro Filter Kit including By-Pass 11 kW for 500 Litre Receiver	**CC1220831**
Factory Fitted Automatic Drain	**CONFIG_F0_F2_DRAIN**
AD2000 (internal separator vessel)	**CONFIG_F0-F4_AD2000**
Factory Fitted Food Grade Oil	**CONFIG_F1_FOODGRADE**
SERVICE & PARTS	
Service Kits 2000 hrs FM07-11 Fixed & RS	**CC1221491**
Service Kit FM07-11 4000 Hrs	**CC1180671**
Service Kit FM07-11 8000 Hrs	**CC1180677**
ChampLube Screw Comp. Lubr. n.4 x 4 L	**CC1180019**

* Service intervals are on calendar months or operating hours, whichever occurs first. Please see pages 88-98 for more details.

FM 7 RS Series: Screw Compressors

Design: Oil flooded, Single stage rotary screw compressor, variable speed, air cooled
Pressure Range: 5 to 13 bar
Electric motor: 7.5 kW - IE3

FM SERIES	TYPE	FM7RS			
CODE		CC1184156	CC1184157	CC1184158	CC1184159
Maximum pressure	bar	7	8	10	13
Capacity at maximum pressure	m^3/min	1.13	0.98	0.95	0.80
Drive motor IP 55 / class F – IE3	kW	7.5	7.5	7.5	7.5
Operating Voltage, 50Hz	400 V	·	·	·	·
Control voltage	24 V	·	·	·	·
C-Pro 2.0 electronic controller		·	·	·	·
Noise Level	db(A)	67	67	67	67
After-cooler		·	·	·	·
Weight	kg	225	225	225	225
Dimensions (LxWxH)	mm	667x630 x1050	667x630x1050	667x630x1050	667x630x1050
Outlet connection EN 10266 (DIN 2999)		3/4"	3/4"	3/4"	3/4"
COMPRESSOR MOUNTED ON 270 LT TANK					
Code		**RSCCP0717**	**RSCCP0718**	**RSCCP0719**	**RSCCP0720**
Weight	kg	320	320	320	320
Dimensions (LxWxH)	mm	1600x700x1600	1600x700x1600	1600x700x1600	1600x700x1600
COMPRESSOR MOUNTED ON 500 LT TANK					
Code		**RSCCP0721**	**RSCCP0722**	**RSCCP0723**	**RSCCP0724**
Weight	kg	385	385	385	385
Dimensions (LxWxH)	mm	2000x700x1700	2000x700x1700	2000x700x1700	2000x700x1700
PACKAGE VERSION, FM / CT / 270					
Code		**RSCCP0733V4**	**RSCCP0734V4**	**RSCCP0735V4**	**RSCCP0736V4**
Weight	kg	360	360	360	360
Dimensions (LxWxH)	mm	1600x700x1600	1600x700x1600	1600x700x1600	1600x700x1600
PACKAGE VERSION, FM / CT / 500					
Code		**RSCCP0737V4**	**RSCCP0738V4**	**RSCCP0739V4**	**RSCCP0740V4**
Weight	kg	425	425	425	425
Dimensions (LxWxH)	mm	2000x700x1700	2000x700x1700	2000x700x1700	2000x700x1700

OPTIONAL	
Alternative Voltage, 230V / 50-60 Hz	**CONFIG_F0_F1_230_VOLT**
Alternative Voltage, 380V / 60 Hz	**CONFIG_F0-F4_380_VOLT**
Factory Fitted Filter Kit including By-Pass 7.5 kW	**CONFIG_F1_FILT1**
Factory Fitted Filter Kit including By-Pass 11 kW	**CONFIG_F1_FILT2**
Retro Filter Kit including By-Pass 7.5 kW for 270 Litre Receiver	**CC1219375**
Retro Filter Kit including By-Pass 7.5 kW for 500 Litre Receiver	**CC1219376**
Factory Fitted Automatic Drain	**CONFIG_F0_F2_DRAIN**
AD2000 (internal separator vessel)	**CONFIG_F0-F4_AD2000**
Factory Fitted Food Grade Oil	**CONFIG_F1_FOODGRADE**
SERVICE & PARTS	
Service Kits 2000 hrs FM07-11 Fixed & RS	**CC1221491**
Service Kit FM07-11 (RS) 4000 Hrs	**CC1180672**
Service Kit FM07-11 (RS) 8000 Hrs	**CC1180678**
ChampLube Screw Comp. Lubr. n.4 x 4 L	**CC1180019**

* Service intervals are on calendar months or operating hours, whichever occurs first. Please see pages 88-98 for more details.

FM 11 RS Series: Screw Compressors

Design: Oil flooded, Single stage rotary screw compressor, variable speed, air cooled
Pressure Range: 5 to 13 bar
Electric motor: 11 kW - IE3

FM SERIES	TYPE	FM11RS			
CODE		CC1184160	CC1184161	CC1184162	CC1184163
Maximum pressure	bar	7	8	10	13
Capacity at maximum pressure and 100% load	m^3/min	1.58	1.56	1.39	1.07
Drive motor IP 55 / class F – IE3	kW	11	11	11	11
Operating Voltage, 50Hz	400 V	·	·	·	·
Control voltage	24 V	·	·	·	·
C-Pro 2.0 electronic controller		·	·	·	·
Noise Level at 70% load	db(A)	67	67	67	67
After-cooler		·	·	·	·
Weight	kg	234	234	234	234
Dimensions (LxWxH)	mm	667x630x1050	667x630x1050	667x630x1050	667x630x1050
Outlet connection EN 10266 (DIN 2999)		3/4"	3/4"	3/4"	3/4"
COMPRESSOR MOUNTED ON 270 LT TANK					
Code		**RSCCP1117**	**RSCCP1118**	**RSCCP1119**	**RSCCP1120**
Weight	kg	329	329	329	329
Dimensions (LxWxH)	mm	1600x700x1600	1600x700x1600	1600x700x1600	1600x700x1600
COMPRESSOR MOUNTED ON 500 LT TANK					
Code		**RSCCP1121**	**RSCCP1122**	**RSCCP1123**	**RSCCP1124**
Weight	kg	394	394	394	394
Dimensions (LxWxH)	mm	2000x700x1700	2000x700x1700	2000x700x1700	2000x700x1700
PACKAGE VERSION, FM / CT / 270					
Code		**RSCCP1133V4**	**RSCCP1134V4**	**RSCCP1135V4**	**RSCCP1136V4**
Weight	kg	369	369	369	369
Dimensions (LxWxH)	mm	1600x700x1600	1600x700x1600	1600x700x1600	1600x700x1600
PACKAGE VERSION, FM / CT / 500					
Code		**RSCCP1137V4**	**RSCCP1138V4**	**RSCCP1139V4**	**RSCCP1140V4**
Weight	kg	434	434	434	434
Dimensions (LxWxH)	mm	2000x700x1700	2000x700x1700	2000x700x1700	2000x700x1700

OPTIONAL	
Alternative Voltage, 230V / 50-60 Hz (3 phases)	**CONFIG_F0_F1_230_VOLT**
Alternative Voltage, 380V / 60 Hz	**CONFIG_F0-F4_380_VOLT**
Factory Fitted Filter Kit including By-Pass 7.5 kW	**CONFIG_F1_FILT1**
Factory Fitted Filter Kit including By-Pass 11 kW	**CONFIG_F1_FILT2**
Retro Filter Kit including By-Pass 11 kW for 270 Litre Receiver	**CC1220830**
Retro Filter Kit including By-Pass 11 kW for 500 Litre Receiver	**CC1220831**
Factory Fitted Automatic Drain	**CONFIG_F0_F2_DRAIN**
AD2000 (internal separator vessel)	**CONFIG_F0-F4_AD2000**
Factory Fitted Food Grade Oil	**CONFIG_F1_FOODGRADE**
SERVICE & PARTS	
Service Kits 2000 hrs FM07-11 Fixed & RS	**CC1221491**
Service Kit FM07-11 (RS) 4000 Hrs	**CC1180672**
Service Kit FM07-11 (RS) 8000 Hrs	**CC1180678**
ChampLube Screw Comp. Lubr. n.4 x 4 L	**CC1180019**

* Service intervals are on calendar months or operating hours, whichever occurs first. Please see pages 88-98 for more details.

Elite 7 & 11 Series: Rotary Screw Compressors

Design: Rotary screw compressor mounted onto a horizontal tank, refrigerated dryer, filtration pack, automatic condensate drain and an oil/water separator.

Pressure Range: 10 bar

Electric motor: 7.5 - 11kW - IE3

ELITE SERIES CODE	TYPE	ELITE 7 RSCCP0741V4	ELITE 11 RSCCP1141V4
Receiver	litres	270	270
Drive Motor	kW	7.5	11
Voltage	V	400/50	400/50
Capacity at maximum pressure	m^3/min	0.97	1.39
Maximum Pressure	bar	10	10
Noise Level	dB (A)	70	70
Connection	inches	3/4"	3/4"
Dimensions	mm	1539 x 1535 x 787	1539 x 1535 x 787
Weight	kg	364	378

OPTIONAL	
Alternative Voltage 230V/50-60 Hz	**CONFIG_F0_F1_230_VOLT**
Alternative Voltage 380/3/60 Hz	**CONFIG_F0-F4_380_VOLT**
AD2000 (internal separator vessel)	**CONFIG_F0-F4_AD2000**
Factory Fitted Food Grade Oil	**CONFIG_F1_FOODGRADE**
SERVICE & PARTS	
Service Kits 2000 hrs FM07-11 Fixed & RS	**CC1221491**
Service Kit FM07-11 4000 Hrs	**CC1180671**
Service Kit FM07-11 8000 Hrs	**CC1180677**
Service Kits 2000/12 H/M Elite Range	**CC1239925**

* Service intervals are on calendar months or operating hours, whichever occurs first. Please see pages 88-98 for more details.

FM 15 Series: Screw Compressors

Design: Oil flooded, Single stage rotary screw compressor, belt drive, air cooled

Pressure Range: 7 to 13 bar

Electric motor: 15 kW - IE3

FM SERIES CODE	TYPE	FM15 CC1184171	 CC1184172	 CC1184173	 CC1184264
Maximum pressure	bar	7	8	10	13
Capacity at maximum pressure	m^3/min	2.64	2.46	2.20	1.79
Drive motor IP 55 / class F – IE3	kW	15	15	15	15
Operating Voltage, 50Hz	400 V	·	·	·	·
Control voltage	24 V	·	·	·	·
C-Pro 2.0 electronic controller		·	·	·	·
Noise Level	db(A)	73	73	73	73
After-cooler		·	·	·	·
Weight	kg	335	335	335	335
Dimensions (LxWxH)	mm	787x698x1202	787x698x1202	787x698x1202	787x698x1202
Outlet connection EN 10266 (DIN 2999)		1"	1"	1"	1"
COMPRESSOR MOUNTED ON 500 LT TANK					
Code		**RSCCP1509**	**RSCCP1510**	**RSCCP1511**	**RSCCP1512**
Weight	kg	495	495	495	495
Dimensions (LxWxH)	mm	2000x800x1850	2000x800x1850	2000x800x1850	2000x800x1850
PACKAGE VERSION, FM / CT / 500					
Code		**RSCCP1517V4**	**RSCCP1518V4**	**RSCCP1519V4**	**RSCCP1520V4**
Weight	kg	545	545	545	545
Dimensions (LxWxH)	mm	2000x850x1850	2000x850x1850	2000x850x1850	2000x850x1850

* Service intervals are on calendar months or operating hours, whichever occurs first. Please see pages 88-98 for more details.

FM 15 Series: Screw Compressors Continued

OPTIONAL	
Alternative Voltage 380/3/60 Hz	CONFIG_F0-F4_380_VOLT
Factory Fitted Filter Kit including By-Pass 15-22 kW	CONFIG_F2_FILT1
Retro Fit Filter Pack with By-Pass 15-18 kW	CC1221356
Factory Fitted Automatic Drain	CONFIG_F0_F2_DRAIN
Factory Fitted Food Grade Oil	CONFIG_F2_FOODGRADE
SERVICE & PARTS	
Service Kit FM15-22 Fixed & RS 2000 Hrs	CC1221492
Service Kit FM15-22 4000 Hrs	CC1180685
Service Kit FM15-22 8000 Hrs	CC1180689
ChampLube Screw Comp. Lubr. n.4 x 4 L	CC1180019

* Service intervals are on calendar months or operating hours, whichever occurs first. Please see pages 88-98 for more details.

FM 18 Series: Screw Compressors

Design: Oil flooded, Single stage rotary screw compressor, belt drive, air cooled
Pressure Range: 7 to 13 bar
Electric motor: 18.5 kW - IE3

FM SERIES	TYPE	FM18			
CODE		CC1184265	CC1184266	CC1184267	CC1184268
Maximum pressure	bar	7	8	10	13
Capacity at maximum pressure	m^3/min	3.15	2.96	2.71	2.38
Drive motor IP 55 / class F – IE3	kW	18.5	18.5	18.5	18.5
Operating Voltage, 50Hz	400 V	·	·	·	·
Control voltage	24 V	·	·	·	·
C-Pro 2.0 electronic controller		·	·	·	·
Noise Level	db(A)	73	73	73	73
After-cooler		·	·	·	·
Weight	kg	361	361	361	361
Dimensions (L x W x H)	mm	787x698x1202	787x698x1202	787x698x1202	787x698x1202
Outlet connection EN 10266 (DIN 2999)		1"	1"	1"	1"
COMPRESSOR MOUNTED ON 500 LT TANK					
Code		RSCCP1809	RSCCP1810	RSCCP1811	RSCCP1812
Weight	kg	521	521	521	521
Dimensions (L x W x H)	mm	2000x800x1850	2000x800x1850	2000x800x1850	2000x800x1850
PACKAGE VERSION, FM / CT / 500					
Code		RSCCP1817V4	RSCCP1818V4	RSCCP1819V4	RSCCP1820V4
Weight	kg	571	571	571	571
Dimensions (L x W x H)	mm	2000x850x1850	2000x850x1850	2000x850x1850	2000x850x1850

OPTIONAL	
Alternative Voltage 380/3/60 Hz	CONFIG_F0-F4_380_VOLT
Factory Fitted Filter Kit including By-Pass 15-22 kW	CONFIG_F2_FILT1
Retro Fit Filter Pack with By-Pass 15-18 kW	CC1221356
Factory Fitted Automatic Drain	CONFIG_F0_F2_DRAIN
Factory Fitted Food Grade Oil	CONFIG_F2_FOODGRADE
SERVICE & PARTS	
Service Kit FM15-22 Fixed & RS 2000 Hrs	CC1221492
Service Kit FM15-22 4000 Hrs	CC1180685
Service Kit FM15-22 8000 Hrs	CC1180689
ChampLube Screw Comp. Lubr. n.4 x 4 L	CC1180019

* Service intervals are on calendar months or operating hours, whichever occurs first. Please see pages 88-98 for more details.

FM 22 Series: Screw Compressors

Design: Oil flooded, Single stage rotary screw compressor, belt drive, air cooled
Pressure Range: 7 to 13 bar
Electric motor: 22 kW - IE3

FM SERIES	TYPE	FM22			
CODE		CC1184269	CC1184270	CC1184169	CC1184271
Maximum pressure	bar	7	8	10	13
Capacity at maximum pressure	m^3/min	3.50	3.23	3.06	2.59
Drive motor IP 55 / class F – IE3	kW	22	22	22	22
Operating Voltage, 50Hz	400 V	·	·	·	·
Control voltage	24 V	·	·	·	·
C-Pro 2.0 electronic controller		·	·	·	·
Noise Level	db(A)	74	74	74	74
After-cooler		·	·	·	·
Weight	kg	367	367	367	367
Dimensions (LxWxH)	mm	787x698x1202	787x698x1202	787x698x1202	787x698x1202
Outlet connection EN 10266 (DIN 2999)		1"	1"	1"	1"
COMPRESSOR MOUNTED ON 500 LT TANK					
Code		**RSCCP2209**	**RSCCP2210**	**RSCCP2211**	**RSCCP2212**
Weight	kg	527	527	527	527
Dimensions (LxWxH)	mm	2000x800x1850	2000x800x1850	2000x800x1850	2000x800x1850
PACKAGE VERSION, FM / CT / 500					
Code		**RSCCP2217V4**	**RSCCP2218V4**	**RSCCP2219V4**	**RSCCP2220V4**
Weight	kg	577	577	577	577
Dimensions (LxWxH)	mm	2000x850x1850	2000x850x1850	2000x850x1850	2000x850x1850

OPTIONAL	
Alternative Voltage 380/3/60 Hz	**CONFIG_F0-F4_380_VOLT**
Factory Fitted Filter Kit including By-Pass 15-22 kW	**CONFIG_F2_FILT1**
Retro Fit Filter Pack with By-Pass 22 kW	**CC1219448**
Factory Fitted Automatic Drain	**CONFIG_F0_F2_DRAIN**
Factory Fitted Food Grade Oil	**CONFIG_F2_FOODGRADE**
SERVICE & PARTS	
Service Kit FM15-22 Fixed & RS 2000 Hrs	**CC1221492**
Service Kit FM15-22 4000 Hrs	**CC1180685**
Service Kit FM15-22 8000 Hrs	**CC1180689**
ChampLube Screw Comp. Lubr. n.4 x 4 L	**CC1180019**

* Service intervals are on calendar months or operating hours, whichever occurs first. Please see pages 88-98 for more details.

FM 15 RS Series: Screw Compressors

Design: Oil flooded, Single stage rotary screw compressor, variable speed, air cooled
Pressure Range: 5 to 13 bar
Electric motor: 15 kW - IE3

FM SERIES	TYPE	FM15RS			
CODE		CC1184272	CC1184273	CC1184274	CC1184275
Maximum pressure	bar	7	8	10	13
Capacity at maximum pressure and 100% load	m^3/min	2.64	2.46	2.20	1.73
Drive motor IP 55 / class F – IE3	kW	15	15	15	15
Operating Voltage, 50Hz	400 V	·	·	·	·
Control voltage	24 V	·	·	·	·
C-Pro 2.0 electronic controller		·	·	·	·
Noise Level at 70% load	db(A)	70	70	70	70
After-cooler		·	·	·	·
Weight	kg	360	360	360	360
Dimensions (L x W x H)	mm	787x698x1202	787x698x1202	787x698x1202	787x698x1202
Outlet connection EN 10266 (DIN 2999)		1"	1"	1"	1"
COMPRESSOR MOUNTED ON 500 LT TANK					
Code		**RSCCP1513**	**RSCCP1514**	**RSCCP1515**	**RSCCP1516**
Weight	kg	520	520	520	520
Dimensions (L x W x H)	mm	2000x800x1850	2000x800x1850	2000x800x1850	2000x800x1850
PACKAGE VERSION, FM / CT / 500					
Code		**RSCCP1521V4**	**RSCCP1522V4**	**RSCCP1523V4**	**RSCCP1524V4**
Weight	kg	570	570	570	570
Dimensions (L x W x H)	mm	2000x850x1850	2000x850x1850	2000x850x1850	2000x850x1850

OPTIONAL	
Alternative Voltage 380/3/60 Hz	**CONFIG_F0-F4_380_VOLT**
FM15-22 Filter Kit with bypass for dryer	**CONFIG_F2_FILT1**
Retro Fit Filter Pack with By-Pass 15-18 kW	**CC1221356**
Factory Fitted Automatic Drain	**CONFIG_F0_F2_DRAIN**
Factory Fitted Food Grade Oil	**CONFIG_F2_FOODGRADE**
SERVICE & PARTS	
Service Kit FM15-22 Fixed & RS 2000 Hrs	**CC1221492**
Service Kit FM15-22 RS 4000 Hrs	**CC1180686**
Service Kit FM15-22 RS 8000 Hrs	**CC1180690**
ChampLube Screw Comp. Lubr. n.4 x 4 L	**CC1180019**

* Service intervals are on calendar months or operating hours, whichever occurs first. Please see pages 88-98 for more details.

FM 18 RS Series: Screw Compressors

Design: Oil flooded, Single stage rotary screw compressor, variable speed, air cooled
Pressure Range: 5 to 13 bar
Electric motor: 18.5 kW - IE3

FM SERIES	TYPE	FM18RS			
CODE		CC1184277	CC1184278	CC1184279	CC1184280
Maximum pressure	bar	7	8	10	13
Capacity at maximum pressure	m^3/min	3.15	2.96	2.66	2.25
Drive motor IP 55 / class F – IE3	kW	18.5	18.5	18.5	18.5
Operating Voltage, 50Hz	400 V	·	·	·	·
Control voltage	24 V	·	·	·	·
C-Pro 2.0 electronic controller		·	·	·	·
Noise Level	db(A)	71	71	71	71
After-cooler		·	·	·	·
Weight	kg	380	380	380	380
Dimensions (L x W x H)	mm	787x698x1202	787x698x1202	787x698x1202	787x698x1202
Outlet connection EN 10266 (DIN 2999)		1"	1"	1"	1"
COMPRESSOR MOUNTED ON 500 LT TANK					
Code		**RSCCP1813**	**RSCCP1814**	**RSCCP1815**	**RSCCP1816**
Weight	kg	540	540	540	540
Dimensions (L x W x H)	mm	2000x800x1850	2000x800x1850	2000x800x1850	2000x800x1850
PACKAGE VERSION, FM / CT / 500					
Code		**RSCCP1821V4**	**RSCCP1822V4**	**RSCCP1823V4**	**RSCCP1824V4**
Weight	kg	590	590	590	590
Dimensions (L x W x H)	mm	2000x850x1850	2000x850x1850	2000x850x1850	2000x850x1850

OPTIONAL	
Alternative Voltage 380/3/60 Hz	**CONFIG_F0-F4_380_VOLT**
FM15-22 Filter Kit with bypass for dryer	**CONFIG_F2_FILT1**
Retro Fit Filter Pack with By-Pass 15-18 kW	**CC1221356**
Factory Fitted Automatic Drain	**CONFIG_F0_F2_DRAIN**
Factory Fitted Food Grade Oil	**CONFIG_F2_FOODGRADE**
SERVICE & PARTS	
Service Kit FM15-22 Fixed & RS 2000 Hrs	**CC1221492**
Service Kit FM15-22 RS 4000 Hrs	**CC1180686**
Service Kit FM15-22 RS 8000 Hrs	**CC1180690**
ChampLube Screw Comp. Lubr. n.4 x 4 L	**CC1180019**

* Service intervals are on calendar months or operating hours, whichever occurs first. Please see pages 88-98 for more details.

FM 22 RS Series: Screw Compressors

Design: Oil flooded, Single stage rotary screw compressor, variable speed, air cooled
Pressure Range: 5 to 13 bar
Electric motor: 22 kW - IE3

FM SERIES	TYPE	FM22RS			
CODE		CC1184281	CC1184282	CC1183666	CC1184283
Maximum pressure	bar	7	8	10	13
Capacity at maximum pressure and 100% load	m^3/min	3.50	3.23	3.06	2.59
Drive motor IP 55 / class F – IE3	kW	22	22	22	22
Operating Voltage, 50Hz	400 V	·	·	·	·
Control voltage	24 V	·	·	·	·
C-Pro 2.0 electronic controller		·	·	·	·
Noise Level at 70% load	db(A)	71	71	71	71
After-cooler		·	·	·	·
Weight	kg	395	395	395	395
Dimensions (L x W x H)	mm	787x698x1202	787x698x1202	787x698x1202	787x698x1202
Outlet connection EN 10266 (DIN 2999)		1"	1"	1"	1"
COMPRESSOR MOUNTED ON 500 LT TANK					
Code		**RSCCP2213**	**RSCCP2214**	**RSCCP2215**	**RSCCP2216**
Weight	kg	555	555	555	555
Dimensions (L x W x H)	mm	2000x800x1850	2000x800x1850	2000x800x1850	2000x800x1850
PACKAGE VERSION, FM / CT / 500 [1]					
Code		**RSCCP2221V4**	**RSCCP2222V4**	**RSCCP2223V4**	**RSCCP2224V4**
Weight	kg	605	605	605	605
Dimensions (L x W x H)	mm	2000x850x1850	2000x850x1850	2000x850x1850	2000x850x1850

OPTIONAL	
Alternative Voltage 380/3/60 Hz	**CONFIG_F0-F4_380_VOLT**
FM15-22 Filter Kit with bypass for dryer	**CONFIG_F2_FILT1**
Retro Fit Filter Pack with By-Pass 22 kW	**CC1219448**
Factory Fitted Automatic Drain	**CONFIG_F0_F2_DRAIN**
Factory Fitted Food Grade Oil	**CONFIG_F2_FOODGRADE**
SERVICE & PARTS	
Service Kit FM15-22 Fixed & RS 2000 Hrs	**CC1221492**
Service Kit FM15-22 RS 4000 Hrs	**CC1180686**
Service Kit FM15-22 RS 8000 Hrs	**CC1180690**
ChampLube Screw Comp. Lubr. n.4 x 4 L	**CC1180019**

* Service intervals are on calendar months or operating hours, whichever occurs first. Please see pages 88-98 for more details.

FM 22+ Series: Screw Compressors

Design: Oil flooded, Single stage rotary screw compressor, variable speed, air cooled
Pressure Range: 5 to 13 bar
Electric motor: 22 kW - IE3

FM 22+ SERIES	TYPE	FM22+			FM22+ RS		
CODE		CC1249505	CC1249506	CC1249507	CC1249508	CC1249509	CC1249510
Nominal pressure	bar	7	8	10	7	8	10
Capacity at working pressure	m^3/min	3.79	3.55	3.4	3.76	3.53	3.36
Operating Voltage, 50Hz	V	400	400	400	400	400	400
Noise Level	db(A)	74	74	74	71/74	71/74	71/74
After-cooler		·	·	·	·	·	·
Weight	kg	367	367	367	395	395	395
Dimensions (LxWxH)	mm	787x698x1202	787x698x1202	787x698x1202	787x698x1202	787x698x1202	787x698x1202
Outlet connection EN 10266 (DIN 2999)		1"	1"	1"	1"	1"	1"
COMPRESSOR MOUNTED ON 500 LT TANK							
Code		**RSCCP2225V4**	**RSCCP2226V4**	**RSCCP2227V4**	**RSCCP2228V4**	**RSCCP2229V4**	**RSCCP2230V4**
Weight	kg	527	527	527	555	555	555
Dimensions (LxWxH)	mm	2000x800x1850	2000x800x1850	2000x800x1850	2000x800x1850	2000x800x1850	2000x800x1850
PACKAGE VERSION, FM / CT / 500 LT TANK							
Code		**RSCCP2231V4**	**RSCCP2232V4**	**RSCCP2233V4**	**RSCCP2234V4**	**RSCCP2235V4**	**RSCCP2236V4**
Weight	kg	577	577	577	605	605	605
Dimensions (LxWxH)	mm	2000x800x1850	2000x800x1850	2000x800x1850	2000x800x1850	2000x800x1850	2000x800x1850

OPTIONAL	
Factory Fitted Filter Kit including By-Pass 15-22 kW	**CONFIG_F2_FILT1**
Retro Fit Filter Pack with By-Pass 22 kW	**CC1219448**
Factory Fitted Automatic Drain	**CONFIG_F0_F2_DRAIN**
Factory Fitted Food Grade Oil	**CONFIG_F2_FOODGRADE**
SERVICE & PARTS FM 22+	
Service Kit FM15-22 Fixed & RS 2000 Hrs	**CC1221492**
Service Kit FM15-22 4000 Hrs	**CC1180685**
Service Kit FM15-22 8000 Hrs	**CC1180689**
ChampLube Screw Comp. Lubr. n.4 x 4L	**CC1180019**
SERVICE & PARTS FM 22+ RS	
Service Kit FM15-22 Fixed & RS 2000 Hrs	**CC1221492**
Service Kit FM15-22 RS 4000 Hrs	**CC1180686**
Service Kit FM15-22 RS 8000 Hrs	**CC1180690**
ChampLube Screw Comp. Lubr. n.4 x 4L	**CC1180019**

* Service intervals are on calendar months or operating hours, whichever occurs first. Please see pages 88-98 for more details.

Notes

At a glance...

Nominal Pressure
5 - 13 bar g

Motor Power
30 - 75kW

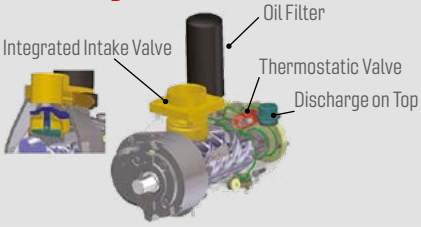
Volume Flow
1.19 - 13.5 m³/min

NEW GENERATION HIGHLY EFFICIENT SCREW COMPRESSORS

Premium efficiency airend

New FM series 30-75 kW features premium quality airends designed and manufactured in house. The manufacturing process is using the latest CNC rotor grinding machinery, coupled with on-line laser technology, in order to maintain precise manufacturing tolerances. Our state of art airends are focused on high efficiency and reliability. Their integrated design offers a very compact solution that ease service and minimises leakage risks.

Semi Integrated Version



High efficiency cooling system

Thanks to the optimum cooling system, the compressor can work in high ambient temperatures of up to 46°C.

Maximum durability

We maximise service life and durability by eliminating elastomer and thermoplastic pipe and tube in system pressure lines, replacing them with corrosion resistant stainless steel tubing and passive zinc coated carbon steel piping. For ease of maintenance we complete the connection with viton sealed, grooved couplings and self-sealing high pressure compression fittings.

Designed for serviceability

Maintenance personnel welcome the FM series compressor range. Service access is quick and easy with all doors able to be removed in seconds. We've also made sure serviceable components including filters are easily accessible and no piping needs to be disconnected to service the separator.

Optimised drive concept

With direct or gear drive coupling, the belt free FM 30-75 Series compressor range not only reduces transmission losses, it improves efficiency and reduces noise. Most importantly, it delivers greater reliability and reduced maintenance costs.

Energy efficient motor

High efficiency TEFC IE3 electric motors are fitted as standard to the entire FM 30-75 Series screw compressor range, reducing not only power consumption but also CO_2 emissions.

New advanced controller C-PRO 2.0 ensures reliable operation and protects your investment by continuously monitoring the operational parameters

- ✓ 3 analog inputs
- ✓ Multi-language: English/German/ French/Italian/Spanish
- ✓ Standard sequence control up to 8 units (up to 7 units fixed speed & 1 variable speed)
- ✓ Standard Modbus
- ✓ 15 failure records in memory
- ✓ Continuous system monitoring

iConn Industry 4.0 option

The C-PRO 2.0 has the possibility to connect with iConn monitoring device iConn is the smart, proactive real-time monitoring service that delivers in-depth and real-time knowledge on the system to our compressed air users.

It enables accurate production planning and total peace-of-mind protection. It keeps users informed on performance, at the same time highlighting potential issues before they become a problem.

- Condition based monitoring
- Predictive maintenance required
- Full Air Manufacturing Control Optimisation
- External data pattern integration

iConn

FM RS

flexiAIR Variable Speed Technology

= Energy savings and lower CO_2 emissions into the environment.

The variable speed compressor: One smart solution

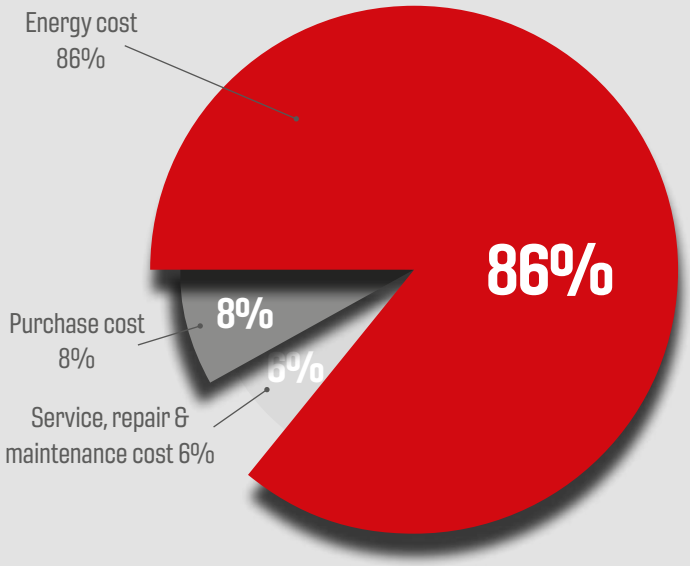
Variable speed compressors can efficiently and reliably handle the varying air demand found in most plant air systems. These compressors speed up and slow down to match air supply to air demand as it fluctuates. The right variable speed compressor in the right application delivers significant energy savings and a stable, consistent air supply.

Compressor energy cost example

NOMINAL KW	OPERATING COST PER YEAR (5000 HOURS) AT COST PER KWH (€)					
	0.06	0.08	0.10	0.12	0.14	0.16
55	16,500	22,000	27,500	33,000	38,500	44,000
75	22,500	30,000	37,500	45,000	52,500	60,000

Note: Hours of operation based on two 8hrs-shifts, 6 days per week. Calculations based on nominal kW.

Cost of compressed air over 5 years



effiDRIVE IES2 COMPLIANT

FM-RS Series features Power Drive Systems that exceed the class **IES2 EN61800-9** requirements and assure high efficiency and high energy savings levels.

FM RS flexiAIR Variable Speed Technology

Allows substantial energy savings of at least 25% of the energy cost

The intelligent C-PRO 2.0 controller

Simplicity

The C-PRO 2.0 controller was designed to make the operators' interface with the variable speed drive transparent. This new generation controller features extra functions for variable speed compressors like drive status display and flexible PID setting according the application. You don't need to be an expert on variable speed drives to operate your compressor. The controller takes care of the details and automatically adjusts the compressor performance to meet your changing air system demands - saving you energy. Changing the discharge pressure is as easy as pressing a button.

Technical data

FM 30 – 45 Series: Screw Compressors, Fixed Speed

Design: Oil flooded, Single stage rotary screw compressor, direct drive, star / delta starting
Pressure Range: 8 to 13 bar
Electric motor: 30 - 45kW - IE3

FM SERIES	TYPE	FM 30			FM 37			FM 45		
CODE		CC1195721	CC1195722	CC1195723	CC1195342	CC1195734	CC1195735	CC1195736	CC1195737	CC1195738
Max. Pressure	bar	8	10	13	8	10	13	8	10	13
Capacity at working pressure	m^3/min	4.87	4.67	4.08	6.4	5.49	5.05	7.52	6.75	5.4
Drive Motor IP55 / Class IE3	kW	30	30	30	37	37	37	45	45	45
Operating Voltage, 50 Hz	400 V	•	•	•	•	•	•	•	•	•
Control Voltage	24V	•	•	•	•	•	•	•	•	•
C-PRO 2.0 Controller		•	•	•	•	•	•	•	•	•
Noise Level	dB(A)	71	71	71	71	71	71	72	72	72
Weight	kg	700			780			850		
Dimensions (LxWxH)	mm	1554 x 894 x 1405			1554 x 894 x 1405			1554 x 894 x 1405		
Compressered Air Delivery Connection		EN 10226 G1 1/4 (DIN 2999-G1 1/4) female								

OPTIONAL	
Alternative Voltage 380/3/60Hz	**CONFIG_F0-F4_380_VOLT**
iConn Factory Fitted	**CONFIG_iConn**
iConn Retrofit Kit	**ZS1216381**
AD2000 (internal separator vessel)	**CONFIG_F0-F4_AD2000**
Factory Fitted Food Grade Oil 30-45 kW	**CONFIG_F3_FOODGRADE**
FM/FMRS 30-45 HRC - Factory Fitted **	**CONFIG_HRC_F3**
FM/FMRS 30-45 HRC - Retro Fit	**CC1232558**
SERVICE & PARTS	
Annual Service Kit FM30 (4000 Hrs)	**CC1198084**
Advanced Service Kit FM30 (8000 Hrs)	**CC1198090**
Annual Service Kit FM37-45 (4000 Hrs)	**CC1198085**
Advanced Service Kit FM37-45 (8000 Hrs)	**CC1198091**
ChampLube Screw Lubricant 20 Ltr	**CC1180020**

* Service intervals are by calendar months or operating hours, whichever occurs first. In dirty ambient conditions service interval must be halved.
** Please note that this is the internal connection kit which enables to connect the compressor to the External CH-Airwatt Heat Recovery units.
Please see pages 88-98 for more details

FM 30 – 45RS Series: Screw Compressors, Variable Speed

Design: Oil flooded, single stage rotary screw compressor, direct drive, star / delta starting
Pressure Range: 5 to 13 bar
Electric motor: 30 - 45kW - IE3

FMRS SERIES CODE	TYPE	FM30RS CC1195739	FM37RS CC1195740	FM45RS CC1195741
Pressure Range	bar		5 - 13	
Flow rate min - max	m^3/min	1.19 - 5.60	1.41 - 6.69	1.41 - 7.84
Drive Motor IP55 / Class IE3	kW	30	37	45
Operating Voltage, 50 Hz	400V	•	•	•
Control Voltage	24V	•	•	•
C-PRO 2.0 Controller		•	•	•
Noise Level at 70% load	dB(A)	70	70	71
Weight	kg	750	830	900
Dimensions (LxWxH)	mm		1554 x 894 x 1405	
Compressered Air Delivery Connection			EN 10226 G1 1/4 (DIN 2999-G1 1/4) female	

OPTIONAL	
Alternative Voltage 380/3/60Hz	**CONFIG_F0-F4_380_VOLT**
iConn Factory Fitted	**CONFIG_iConn**
iConn Retrofit Kit	**ZS1216381**
AD2000 (internal separator vessel)	**CONFIG_F0-F4_AD2000**
Factory Fitted Food Grade Oil 30-45 kW	**CONFIG_F3_FOODGRADE**
FM/FMRS 30-45 HRC - Factory Fitted **	**CONFIG_HRC_F3**
FM/FMRS 30-45 HRC - Retro Fit	**CC1232558**
SERVICE & PARTS	
Annual Service Kit FMRS30 (4000 Hrs)	**CC1198086**
Advanced Service Kit FMRS30 (8000 Hrs)	**CC1198092**
Major Service Kit FM30 RS	**CC1198098**
Annual Service Kit FMRS37-45 (4000 Hrs)	**CC1198087**
Advanced Service Kit FMRS37-45 (8000 Hrs)	**CC1198093**
ChampLube Screw Lubricant 20 Ltr (x2)	**CC1180020**

* Service intervals are by calendar months or operating hours, whichever occurs first. In dirty ambient conditions service interval must be halved.
** Please note that this is the internal connection kit which enables to connect the compressor to the External CH-Airwatt Heat Recovery units.
Please see pages 88-98 for more details

FM 55 – 75 Series: Screw Compressors, Fixed Speed

Design: Oil flooded, single stage rotary screw compressor, direct drive, star / delta starting
Pressure Range: 8 to 13 bar
Electric motor: 55 - 75kW - IE3

FM SERIES	TYPE	FM55			FM75		
CODE		CC1195745	CC1195747	CC1195748	CC1195749	CC1195750	CC1195751
Pressure Range	bar	8	10	13	8	10	13
Capacity at working pressure	m^3/min	10.55	9.14	7.9	12.15	10.26	8.91
Drive Motor IP55 / Class IE3	kW	55	55	55	75	75	75
Operating Voltage, 50 Hz	400V	•	•	•	•	•	•
Control Voltage	24V	•	•	•	•	•	•
C-PRO 2.0 Controller		•	•	•	•	•	•
Noise Level at 70% load	dB(A)	73	73	73	74	74	74
Weight	kg	1150			1210		
Dimensions (LxWxH)	mm	2004 x 1179 x 1505			2004 x 1179 x 1505		
Compressered Air Delivery Connection		EN 10226 G2 (DIN 2999-G2) female					

OPTIONAL	
Alternative Voltage 380/3/60Hz	**CONFIG_F0-F4_380_VOLT**
iConn Factory Fitted	**CONFIG_iConn**
iConn Retrofit Kit	**ZS1216381**
AD2000 (internal separator vessel)	**CONFIG_F0-F4_AD2000**
Factory Fitted Food Grade Oil 55-75 kW	**CONFIG_F4_FOODGRADE**
FM/FMRS 55-75 HRC - Factory Fitted **	**CONFIG_HRC_F4**
FM/FMRS 55-75 HRC - Retro Fit (needs Thermostatic element for fixed speed 8 and 10 bar)	**CC1232559**
Thermostatic Element for Retro Fit HRC_F4	**A11175374**
SERVICE & PARTS	
Annual Service Kit FM55-75 (4000 Hrs)	**CC1198088**
Advanced Service Kit FM55-75 (8000 Hrs)	**CC1198094**

* Service intervals are defined by calendar months or operating hours, whichever occurs first. In dirty ambient conditions service interval must be halved.
** Please note that this is the internal connection kit which enables to connect the compressor to the External CH-Airwatt Heat Recovery units.
Please see pages 88-98 for more details

FM 55 – 75RS Series: Screw Compressors, Fixed Speed

Design: Oil flooded, single stage rotary screw compressor, direct drive, star / delta starting
Pressure Range: 5 to 13 bar
Electric motor: 55 - 75kW - IE3

FM SERIES CODE	TYPE	FM55RS CC1195752	FM75RS CC1195753
Pressure Range	bar	5 - 10	5 - 13
Flow rate min - max	m^3/min	2.24 - 10.43	1.65 - 13.57
Drive Motor IP55 / Class IE3	kW	55	75
Operating Voltage, 50 Hz	400V	·	·
Control Voltage	24V	·	·
C- PRO 2.0 Controller		·	·
Noise Level at 70% load	dB(A)	71	74
Weight	kg	1220	1280
Dimensions (LxWxH)	mm	2004 x 1179 x 1505	
Compressered Air Delivery Connection		EN 10226 G2 (DIN 2999-G2) female	

OPTIONAL	
Alternative Voltage 380/3/60Hz	**CONFIG_F0-F4_380_VOLT**
iConn Factory Fitted	**CONFIG_iConn**
iConn Retrofit Kit	**ZS1216381**
AD2000 (internal separator vessel)	**CONFIG_F0-F4_AD2000**
Factory Fitted Food Grade Oil 55-75 kW	**CONFIG_F4_FOODGRADE**
FM/FMRS 55-75 HRC - Factory Fitted **	**CONFIG_HRC_F4**
FM/FMRS 55-75 HRC - Retro Fit	**CC1232559**
SERVICE & PARTS	
Annual Service Kit FMRS55-75 (4000 Hrs)	**CC1198089**
Advanced Service Kit FMRS55-75 (8000 Hrs)	**CC1198095**
Major Service Kit FM55-FM75 RS	**CC1198102**
ChampLube Screw Lubricant 20 Ltr (x2) (55-90kW)	**CC1180020**

* Service intervals are defined by calendar months or operating hours, whichever occurs first. In dirty ambient conditions service interval must be halved.
** Please note that this is the internal connection kit which enables to connect the compressor to the External CH-Airwatt Heat Recovery units.
Please see pages 88-98 for more details

Notes

At a glance...

Nominal Pressure
5 - 13 bar g

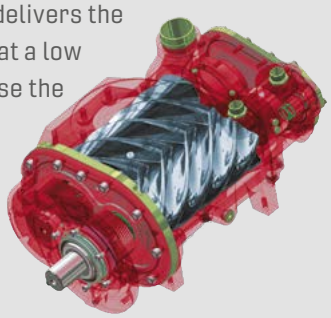
Motor Power
90 - 132kW

Volume Flow
5.26 - 24.79 m³/min

COMPRESSED AIR TECHNOLOGIES BUILT TO DELIVER VALUE

Premium efficiency airend

The new highly efficient airend delivers the highest quality compressed air at a low rotational speed, to help minimise the unit's energy consumption and achieve excellent performance.



Compressor Controller Pilot TS Features & functions

- Home Page – instant overview of the compressor status
- Real Time Clock – allows pre-setting of compressor starting/stopping
- Second Pressure Setting
- Integrated Cooling and Dryer Control
- Fault History Log – for in-depth analysis
- Remote Control via Programmable Inputs
- Auto Restart after Power Failure
- Optional Base Load Sequencing
- SD Card – stores several run characteristics

Eliminating all Risks

Protect your investment and minimise downtimes with the 5-year extended warranty and with the Industry 4.0 Solution iConn.

OUTSTANDING EFFICIENCY

FM RS flexiAIR

Variable Speed Technology

Allows substantial energy savings of at least 25% of the energy cost

iConn Industry 4.0 Option

The controller Pilot TS has the possibility to connect with iConn monitoring device.

iConn is the smart, proactive real-time monitoring service that delivers in-depth and real-time knowledge on the system to our compressed air users. It enables accurate production planning and total peace-of-mind protection. iConn keeps users informed on performance, at the same time highlighting potential issues before they become a problem.

- Condition based monitoring
- Predictive maintenance required
- Full Air Manufacturing Control Optimisation
- External data pattern integration

effiDRIVE IES2 COMPLIANT

FM-RS Series features Power Drive Systems that exceed the class **IES2 EN61800-9** requirements and assure high efficiency and high energy savings levels.

iConn

Technical data

FM 90 – 132 Series Screw Compressors, Fixed Speed

Design: Oil flooded, Single stage rotary screw compressor, direct drive, star / delta starting
Pressure Range: 7.5 to 13 bar
Electric motor: 90 - 132kW - IE3

FM SERIES	TYPE	FM90			FM110			FM132		
CODE		A34905437	A34905438	Configurator FM9013	A34905440	A34905441	Configurator FM11013	A34905443	A34905444	Configurator FM13213
	REC	FLOOR	FLOOR	FLOOR	FLOOR	FLOOR	FLOOR	FLOOR	FLOOR	FLOOR
Max. Pressure	bar	7.5	10	13	7.5	10	13	7.5	10	13
	PSI	109	145	188	109	145	188	109	145	188
	CFM	641.32	547.74	477.46	762.80	665.69	581.64	875.46	759.63	660.39
Capacity at working pressure	m^3/min	18.16	15.51	13.52	21.60	18.85	16.47	24.79	21.51	18.70
Drive Motor IP55 / Class IE3	kW	90	90	90	110	110	110	132	132	132
	HP	125	125	125	150	150	150	180	180	180
Operating Voltage, 50 Hz	400 V	·	·	·	·	·	·	·	·	·
Air Cooled		·	·	·	·	·	·	·	·	·
Noise Level	dB(A)	75	75	75	77	77	77	78	78	78
Weight	kg	2447			2532			2764		
Dimensions (LxWxH)	mm	2290 x 1327 x 2039			2290 x 1327 x 2039			2290 x 1327 x 2039		
Compressered Air Delivery Connection		EN 10226 R 2 1/2								

OPTIONAL
Alternative Voltage 380V/60Hz
Heat Recovery Integrated
Heat Recovery External
Heat Recovery Retro-fit Integrated
Heat Recovery Retro-fit External
Canopy Heater
Oil Thermostat 70°C
Food Grade Lubricant
Synthetic Oil
Water Separator + Drain
iConn Factory Fitted
iConn Retrofit kit
Remote on-off
Filter Monitoring
Base Load Sequencing
Profibus
Potential free contact kit
SERVICE & PARTS
Service Kit for 4000h
Service Kit for 8000h

For 8000 Hrs Service both 4000 and 8000 Hrs kits must be purchased together.
Heat recovery requires synthetic oil. Not included in the price of heat recovery. In case of order please add the price of heat recovery + synthetic oil. Food Grade oil is synthetic.
Please see pages 88-98 for more details.

FM 90 – 132 RS Series Screw Compressors, Variable Speed

Design: Oil flooded, Single stage rotary screw compressor, direct drive, star / delta starting
Pressure Range: 5 to 13 bar
Electric motor: 90 - 132kW - IE3

FM SERIES	TYPE	FM90RS	FM110RS	FM132RS
CODE		A34905439	A34905442	A34905445
	REC	FLOOR	FLOOR	FLOOR
Max. Pressure	bar	5 - 13	5 - 13	5 - 13
	PSI	73 - 188	73 - 188	73 - 188
	CFM	185.76 - 641.32	186.76 - 759.63	187.76 - 874.40
Capacity at working pressure	m^3/min	5.26 - 18.16	5.26 - 21.51	5.26 - 24.76
Drive Motor IP55 / Class IE3	kW	90	110	132
	HP	125	150	180
Operating Voltage, 50 Hz	400 V	·	·	·
Air Cooled		·	·	·
Noise Level	dB(A)	74	75	76
Weight	kg	2579	2604	2655
Dimensions (LxWxH)	mm	2290 x 1327 x 2039		
Compressered Air Delivery Connection		EN 10226 R 2 1/2		

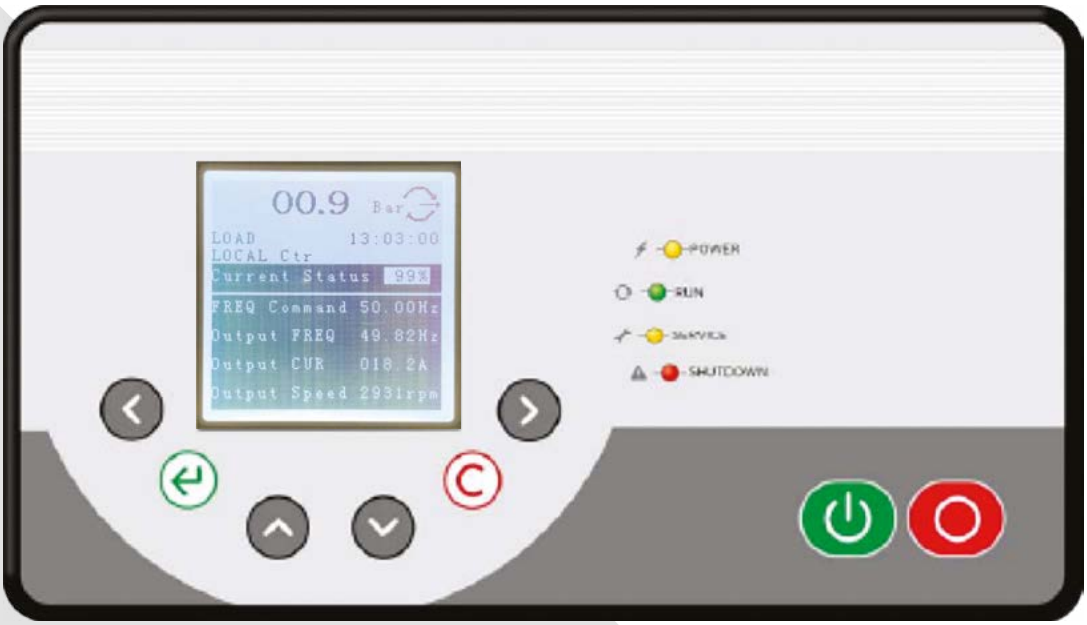
OPTIONAL	
Alternative Voltage 380V/60Hz	**CONFIG_VOLTAGE FM**
Heat Recovery Integrated	**CONFIG_HEAT_REC_INT FM**
Heat Recovery External	**CONFIG_HEAT_REC_EXT FM**
Heat Recovery Retro-fit Integrated	**ZS1196556**
Heat Recovery Retro-fit External	**ZS1196954**
Canopy Heater	**CONFIG_HEATER**
Food Grade Lubricant	**CONFIG_FOOD_GRADE_OIL FM**
Synthetic Oil	**CONFIG_SYNTHETIC_OIL FM**
Water Separator + Drain	**CONFIG_SEPARATOR FM**
iConn Factory Fitted	**CONFIG_iConn**
iConn Retrofit kit	**ZS1216381**
Remote on-off	**CONFIG_REMOTE**
Filter Monitoring	**CONFIG_FILT_MON**
Base Load Sequencing	**CONFIG_BASE_LOAD**
Profibus	**CONFIG_PROF**
Potential free contact kit	**CONFIG_CONTACT_KIT**
SERVICE & PARTS	
Service Kit for 4000h	**SKFM90132-1-RS**
Service Kit for 8000h	**MKFM90132**

For 8000 Hrs Service both 4000 and 8000 Hrs kits must be purchased together.
Heat recovery requires synthetic oil. Not included in the price of heat recovery. In case of order please add the price of heat recovery + synthetic oil. Food Grade oil is synthetic.
Please see pages 88-98 for more details.

SEQUENCE MULTIPLE COMPRESSORS

- C-PRO 1+
- C-PRO 2
- PILOT TS


00.9 Bar
LOAD 13:03:00
LOCAL Ctr
Current Status 99%
FREQ Command 50.00Hz
Output FREQ 49.82Hz
Output CUR 018.2A
Output Speed 2931rpm
POWER
RUN
SHUTDOWN



SEQUENCE MULTIPLE COMPRESSORS

All the Champion controllers offer extra communication modules that allow several units to talk to each other and optimise system efficiency. Our controllers allow the system to truly optimise efficiency as they recognise the capabilities of other machines and their operation.

Depending on the controller and the type of the machine there are the following options :

UNITS TO SEQUENCE	QTY	FIXED SPEED ONLY 1-2	1-3	1-4	1-12	VARIABLE SPEED ONLY
Fixed Speed with C- Pro 1.0+ controller	ID number	211759A	CC1094891	ZS1071505	ZS1060135	—
	Module	2U	3U	Connect 4	Connect 12	—

	UNITS / QTY	1-12 FIXED & VARIABLE SPEED
Variable and fixed speed compressors in a unique system with C-Pro 1.0, and/or C-Pro 2.0 and/or Pilot TS*	ID number	ZS1060135
	Module	Connect 12

	UNITS / QTY	SEQUENCE 1-8 FIXED SPEED COMPRESSORS OR 1-7 FIXED SPEED & 1 VARIABLE SPEED
Fixed speed compressors in a unique system with C-PRO 2.0 - FM series	ID number	Standard module - included in C-PRO 2.0
	Module	—

*Additional module needed when C-Pro 2.0 is being connected with Connect 12

Notes

airINSITE

Advanced Compressed Air Energy Analyser

PROFESSIONAL AIR AUDITS

Get the best out of your compressed air system and **reduce your environmental impact**

With increasing energy costs a fact of life for business, and carbon and emissions levies and taxes a looming reality, the performance and efficiency of your compressed air systems have never been more important. Potential energy savings not only reduce the environmental impact of your business, they also return money to your bottom line.

- Lower capital spending
- Lower your carbon footprint
- Save money and energy

Champion Air Audit - ultimately saving money and energy resources

Champion Audits provide complete air auditing services for compressed air systems:

- To achieve the lowest operating cost for the compressed air system and a fast return on any investment
- To improve manufacturing productivity

Accurate analysis AND solutions...

Champion Air Audits are performed to the highest standard!

- Delivering detailed reports and analysis of your compressed air system
- Identifying improvements in your compressed air system through system performance optimisation, leak reduction and practical air management processes

Where are the savings made?

SUPPLY SIDE
10 to 20 % of the savings can be commonly found on the supply side of a compressed air system by identifying areas of identifying areas in:
Equipment
Technology
Controls
Monitoring
Equipment maintenance
Installation issues

DEMAND SIDE
A further 20 to 30% of savings can be commonly found on the demand side of a compressed air system by identifying areas of improvement in:
Compressed air leaks
Artificial demand
System dynamics
System design
Monitoring

Delivering tangible efficiencies through innovative energy consumption monitoring

Champion's latest cloud-based software data logging solution

- Combining unique application expertise with proven hardware and software platforms to deliver the complete, value-adding analytics service

Champion airINSITE has the facility to measure:

- Amps • Volts • kW • Pressure • Pressure Dewpoint
- Temperature • Any 4-20 ma signal • Actual flow

Our airINSITE data loggers incorporate high quality sensors to collect and store information relating to a system's pressure, temperature, pressure dew point and flow rate. Our current and voltage loggers enable true power to be accurately measured, with power costs calculated using these figures. The latest software technology allows us to analyse, chart, graph and prepare professional audit reports. Simulation wizards allow us to show you cost savings by simulating the use of different compressor configurations, of both fixed and variable, against your existing compressor volume.

Making **cost savings** has never been so easy

Champion airINSITE: Unique Compressed Air Energy Auditing system

Design: Compressed air energy analyser
Champions latest cloud-based software data logging solution

AIRINSITE COMPLETE CASE KITS		
MODEL	DESCRIPTION	MATERIAL NO.
airINSITE	Base station & PSU	ZS1088920
	Logger, 4–20mA – complete case kit	ZS1088921
	Logger, moisture (dew point) – complete case kit	ZS1088922
	Logger, flow – complete case kit	ZS1088923
	Logger, temperature (PT1000) – complete case kit	ZS1088924
	Logger, pressure (0 –16BAR) – complete case kit	ZS1088925
	Logger, current & volts – complete case kit	ZS1088926
	Accessory, logger carry case	ZS1106999
	Logger, 0–60 bar – complete case kit	ZS1133091
	Small logger, current & volts – complete case kit	ZS1160311

LEAKAGES				
MODEL	LEAK SIZE [MM]	LEAK VOLUME @7.5 BAR L/MIN	ENERGY LOSS [kW]	ENERGY LOSS [EUR/YEAR]
Leakage 1	1	75	0.6	315.00
Leakage 2	1.5	150	1.3	683.00
Leakage 3	2	260	2	1,051.00
Leakage 4	3	600	4.4	2,312.00
Leakage 5	4	1100	8.8	4,625.00
Leakage 6	5	1700	13.2	6,938.00

ROTARY VANE AIR COMPRESSORS 1.1 - 22KW

- Innovative rotary vane technology
- Industry leading reliability & versatility
- Fixed and variable speed models
- Small and compact base or receiver mounted and fully enclosed models
- Pressure range 6 - 10 bar
- Electric motor 1.1kW to 22kW
- Hydrovane Pro Electronic Controller
- Extended warranties available


Hydrovane
HR04E
Hydrovane
HR05PR
Hydrovane
HV11
Hydrovane
HV01

At a glance...

Nominal Pressure
6 - 10 bar g

Motor Power
1.1 - 22kW

Volume Flow
0.12 - 3.60 m^3/min

ROBUST AND RELIABLE – DESIGNED TO KEEP RUNNING AND RUNNING...

Built to Last - Expert Rotary Vane Technology

The Hydrovane range of air compressors utilises the innovative rotary vane principle to produce compressed air. This compressed air production method was first marketed in 1952 and is widely considered one of the most effective, simple technologies.

Reliability, reliability, reliability...!

Hydrovane compressors can last over 100,000 hours – equivalent to 8 hours of operation every working day for 40 years! By only utilising one significant moving part to compress air, Hydrovane compressors have fewer internal elements that can break down, drastically reducing downtime and maintenance costs. In addition, due to the slow rotating speed of the vane technology, stress on the internal equipment is reduced, dramatically increasing the life of the air end. These innovative features allow Hydrovane systems to act consistently and reliably at their best.

Low Noise

The low, non-disruptive noise levels of these compressors allow them to be sited close to the point of use. This enables them to operate seamlessly within your compressed air system without the need for complicated, costly pipework or compressor storage.

High Air Quality

Hydrovane compressors ensure good quality air due to their low operating temperatures. This, once again, is thanks to their slow rotational speed, which allows for good heat transfer. Low operating temperatures, coupled with Hydrovane's innovative, integral aftercooler, ensure the removal of water vapour. This reduces the risk of contamination and equipment damage whilst maximising air quality.

A Range of Vane Compressors – from stand-alone…

Open Style – Fixed Speed

These open fixed-speed solutions are small, compact solutions ideal for light industrial and workshop applications – for where compressed air outlets need be situated close to the point of use.

1.1 - 7kW Models
Base or Receiver mounted

- 50 Hz
- 1.1 - 7 kW
- 10 bar
- 0.12 - 1.04 m^3/min
- 4 - 37 cfm

Enclosed – Fixed and Regulated Speed (RS)

Taking components that have been developed specifically with energy-saving in mind, the designers and engineers have developed a rotary vane compressor for the twenty first century, with the highest levels of efficiency in mind. For the ultimate in energy saving technology, we offer our 7 to 22 kW machines with a Regulated Speed (RS) option. RS machines optimise energy efficiency when operated below full load capacity. This can deliver benefits of up to 50% energy savings compared to the equivalent standard fixed speed model.

4 - 22kW Models
Fully Enclosed

- 50 Hz
- 4 - 22 kW
- 7 - 10 bar
- 0.5 - 3.5 m^3/min
- 20 - 125 cfm

…to the Complete Compressed Air Solutions

Fully integrated packages promote a more cost-effective system. and include Hypac systems – fully equipped with integrated membrane or refrigerant dryers and receiver and filtration options. These innovative solutions can be delivered to you as a factory-built package or supplied as a kit for local assembly.

Hypac 4 - 22kW ERD - Fixed & Regulated Speed (RS) & 5 Series SE ATK 1.1 - 4kW
Integrated Rotary Vane with Receiver, Dryer & Filters

You can save even further with our most comprehensive offering for optimum convenience. This solution is fully packaged with integrated receivers, refrigerant dryers and filtration, offering the best solution for your compressed air needs.

- Complete Package
- Integrated Refrigerant Dryer or Membrane Dryer
- Integrated Receiver
- Filter Pack
- 50 Hz
- 1.1 - 22 kW
- 6 - 10 bar
- 0.14 - 3.5 m^3/min
- 4 - 125 cfm

Eliminating all Risks

Our 10 year warranty ensures up to 44,000 operating hours, up to 6 years on the compressor, and 10 years on the specially developed airend. With the warranty extension being free of charge, you can rest assured and enjoy total peace of mind. We've got you covered!1) Protect your investment and minimise downtimes with the Industry 4.0 Solution iConn. HV11-22 models are equipped with our iConn Industry 4.0 solution as a standard.

1) 10 years/44,000 hours on the air end.
Whichever is the soonest. Subject to Terms & Conditions.

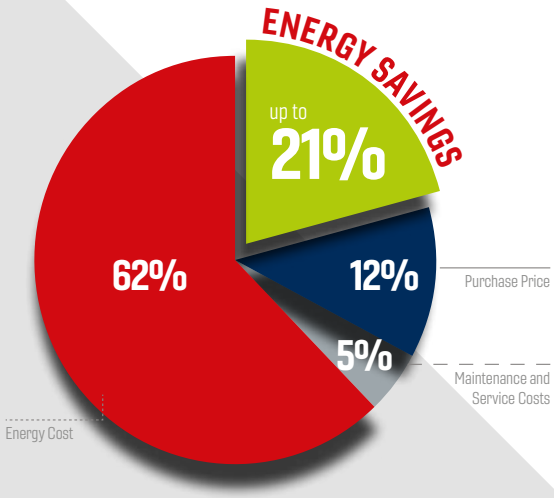
Save up to 21% on energy costs with regulated speed (RS) technology

Regulated speed models can reliably and efficiently cope with varying air demand. By only using the energy it needs to create the compressed air it needs, a regulated speed Hydrovane compressor enables a reduced cost of ownership due to lowered energy costs.

Pro Electronic Controller at the heart of Performance

Fixed and regulated speed compressors in the 4 to 22 kW model range, are fitted with the Hydrovane Pro Electronic Controller as standard. With simple-to-use, efficient electronics, the intelligent control system helps protect your investment with unmatched operational monitoring and puts you in total control.

Hydrovane Regulated Speed Compressor



HV01 - HV04 - Open Frame

CODE	MODEL	MOTOR POWER kW	VOLTAGE/ PHASE 50Hz	STARTER TYPE	CONFIGURATION	RECEIVER CAPACITY LITRES	COMPRESSED AIR OUTPUT M³/MIN	COMPRESSED AIR OUTPUT CFM	MAX. WORKING PRESSURE BAR [G]	MAX. WORKING PRESSURE PSI [G]	NOISE LEVEL DB[A]	DIMENSIONS [MM] L	DIMENSIONS [MM] W	DIMENSIONS [MM] H	WEIGHT KG	AIR OUTLET SIZE
501PUBS10-2415D000 501PUBS10-4035D000	HV01	1.1	240V 1Ph 400V 3Ph	DOL	Base Mounted	N/A	0.12	4.2	10	145	62	673	313	366	40	3/8" F-BSP
502PUBS10-2415D000 502PUBS10-4035D000	HV02	2.2	240V 1Ph 400V 3Ph				0.23	8.1			69					
501PURS10-2415D600 501PURS10-4035D600	HV01	1.1	240V 1Ph 400V 3Ph		Receiver Mounted	100	0.12	4.2			62	966	386	784	75	
502PURS10-2415D600 502PURS10-4035D600	HV02	2.2	240V 1Ph 400V 3Ph				0.23	8.1			69					
504PURS10-4035D300	HV04	4	400v 3Ph			200	0.57	20.1			73	1390	462	998	145	1/2" F-BSP

HR05PR - HR07PR - Open Frame

CODE	MODEL	MOTOR POWER kW	VOLTAGE/ PHASE 50Hz	STARTER TYPE	CONFIGURATION	RECEIVER CAPACITY LITRES	COMPRESSED AIR OUTPUT M³/MIN	COMPRESSED AIR OUTPUT CFM	MAX. WORKING PRESSURE BAR (G)	MAX. WORKING PRESSURE PSI (G)	NOISE LEVEL DB(A)	DIMENSIONS (MM) L	DIMENSIONS (MM) W	DIMENSIONS (MM) H	WEIGHT KG	AIR OUTLET SIZE
HR05PR07-4035S100	HR05PR-07	5.5	400v 3Ph	SD	Receiver Mounted	200	0.92	32.5	7	101	73	1332	760	1068	215	1/2" F-BSP
HR05PR10-4035S100	HR05PR-10						0.77	27	10	145						
HR07PR07-4035S100	HR07PR-07	7.5					1.27	44.7	7	101						
HR07PR10-4035S100	HR07PR-10						1.05	37	10	145						

HR04E - HR07E - Enclosed Fixed Speed

CODE	MODEL	MOTOR POWER kW	VOLTAGE/ PHASE 50Hz	STARTER TYPE	COMPRESSED AIR OUTPUT M³/ MIN	COMPRESSED AIR OUTPUT CFM	MAX. WORKING PRESSURE BAR [G]	MAX. WORKING PRESSURE PSI [G]	NOISE LEVEL DB[A]	DIMENSIONS [MM] L	DIMENSIONS [MM] W	DIMENSIONS [MM] H	WEIGHT KG	AIR OUTLET SIZE
HR04E07-4035S200	HR04E-07	4	400v 3Ph	SD	0.69	24.2	7	101	67	680	630	1055	220	G3/4'
HR04E10-4035S200	HR04E-10				0.57	20.13	10	145						
HR05E07-4035S200	HR05E-07	5.5			0.92	32.52	7	101						
HR05E10-4035S200	HR05E-10				0.77	27.02	10	145						
HR07E07-4035S200	HR07E-07	7.5			1.27	44.98	7	101	68					
HR07E10-4035S200	HR07E-10				1.05	37	10	145						

HR07E - Enclosed Regulated Speed

CODE	MODEL	MOTOR POWER kW	VOLTAGE/ PHASE 50Hz	STARTER TYPE	CONFIGURATION	COMPRESSED AIR OUTPUT M³/ MIN	COMPRESSED AIR OUTPUT CFM	MAX. WORKING PRESSURE BAR [G]	MAX. WORKING PRESSURE PSI [G]	NOISE LEVEL DB[A]	DIMENSIONS [MM] L	DIMENSIONS [MM] W	DIMENSIONS [MM] H	WEIGHT KG	AIR OUTLET SIZE
HR07E10-4035V200	HR07E-RS	7.5	400v 3Ph	VSD	Base	0-1.27	0-45	6-10	87-145	68	680	630	1055	230	G3/4'

HV11 - HV22 - Enclosed Fixed Speed

CODE	MODEL	MOTOR POWER kW	VOLTAGE/ PHASE 50Hz	STARTER TYPE	COMPRESSED AIR OUTPUT M³/ MIN	COMPRESSED AIR OUTPUT CFM	MAX. WORKING PRESSURE BAR [G]	MAX. WORKING PRESSURE PSI [G]	NOISE LEVEL DB[A]	DIMENSIONS [MM] L	DIMENSIONS [MM] W	DIMENSIONS [MM] H	WEIGHT KG	AIR OUTLET SIZE
V11ACE08-4035S800	HV11-08	11	400V 3Ph	SD	1.63	57.6	8	116	69	680	630	1055	69	Rp3/4'
V11ACE10-4035S800	HV11-10				1.41	49.8	10	145						
V15ACE08-4035S800	HV15-08	15			2.21	78.1	8	116	70				70	
V15ACE10-4035S800	HV15-10				2.01	71	10	145						
V18ACE08-4035S600	HV18-08	18			2.88	101.7	8	116						Rp1'
V18ACE10-4035S600	HV18-10				2.55	90.1	10	145						
V22ACE08-4035S600	HV22-08	22			3.6	127.1	8	116	71				71	
V22ACE10-4035S600	HV22-10				2.96	104.5	10	145						

HV11 - HV22 - Enclosed Regulated Speed

CODE	MODEL	MOTOR POWER kW	VOLTAGE/ PHASE 50Hz	STARTER TYPE	CONFIGURATION	COMPRESSED AIR OUTPUT M³/ MIN	COMPRESSED AIR OUTPUT CFM	MAX. WORKING PRESSURE BAR [G]	MAX. WORKING PRESSURE PSI [G]	NOISE LEVEL DB[A]	DIMENSIONS [MM] L	DIMENSIONS [MM] W	DIMENSIONS [MM] H	WEIGHT KG	AIR OUTLET SIZE
V11ACE08-4035V900	HV11RS	11	400V 3Ph	VSD	Base	0-1.74	0-62	6-10	87-145	69	680	630	1055	421	Rp3/4'
V15ACE08-4035V900	HV15RS	15				0-2.29	0-81	6-10	87-145	70				434	
V18ACE08-4035V700	HV18RS	18				0-2.96	0-105	6-10	87-145					542	Rp1'
V22ACE08-4035V600	HV22RS	22				0-3.53	0-125	6-10	87-145	71				556	

Hypac Integrated Rotary Vane - Fixed Speed

CODE	MODEL	MOTOR POWER kW	VOLTAGE/ PHASE 50Hz	STARTER TYPE	CONFIGURATION	RECEIVER CAPACITY LITRES	COMPRESSED AIR OUTPUT M³/ MIN	COMPRESSED AIR OUTPUT CFM	MAX. WORKING PRESSURE BAR [G]	MAX. WORKING PRESSURE PSI [G]	NOISE LEVEL DB[A]	DIMENSIONS [MM] L	DIMENSIONS [MM] W	DIMENSIONS [MM] H	WEIGHT KG	AIR OUTLET SIZE
HR04ERD07-4035S400	HR04ERD-07	4	400V 3ph	SD	Integrated Refrigerant Dryer & Receiver	260	0.68	24	7	101	67	1264	756	1675	400	3/4'BSP
HR04ERD10-4035S400	HR04ERD-10						0.57	20	10	145						
HR05ERD07-4035S400	HR05ERD-07	5.5					0.92	33	7	101						
HR05ERD10-4035S400	HR05ERD-10						0.77	27	10	145						
HR07ERD07-4035S400	HR07ERD-07	7.5					1.27	45	7	101	68					
HR07ERD10-4035S400	HR07ERD-10						1.05	37	10	145						
V11AERD08-4035SB00	HV11AERD-08	11				272	1.63	58	8	116	69	1357	1187	1616	605	G3/4'
V11AERD10-4035SB00	HV11AERD-10						1.41	50	10	145						
V15AERD08-4035SB00	HV15AERD-08	15					2.21	78	8	116	70				620	
V15AERD10-4035SB00	HV15AERD-10						2.01	71	10	145						
V18AERD08-4035S900	HV18AERD-08	18					2.88	102	8	116					710	
V18AERD10-4035S900	HV18AERD-10						2.55	90	10	145						
V22AERD08-4035S900	HV22AERD-08	22					3.6	127	8	116	71				740	
V22AERD10-4035S900	HV22AERD-10						2.96	105	10	145						

Hypac Integrated Rotary Vane - Fixed Speed

CODE	MODEL	MOTOR POWER kW	VOLTAGE/ PHASE 50Hz	STARTER TYPE	CONFIGURATION	RECEIVER CAPACITY LITRES	COMPRESSED AIR OUTPUT M³/ MIN	COMPRESSED AIR OUTPUT CFM	MAX. WORKING PRESSURE BAR [G]	MAX. WORKING PRESSURE PSI [G]	NOISE LEVEL DB[A]	DIMENSIONS [MM] L	DIMENSIONS [MM] W	DIMENSIONS [MM] H	WEIGHT KG	AIR OUTLET SIZE
HR07ERD10-4035V400	HR07ERD-RS	7.5	400V 3ph	VSD	Integrated Refrigerant Dryer & Receiver	260	0-1.27	0-45	6-10	87-145	68	1264	756	1675	410	3/4'BSP
V11AERD08-4035VC00	HV11AERD-RS	11				272	0-1.74	0-62	6-10	87-145	69	1357	1187	1616	620	G3/4'
V15AERD08-4035VC00	HV15AERD-RS	15					0-2.29	0-81	6-10	87-145	70			1617	634	
V18AERD08-4035VA00	HV18AERD-RS	18					0-2.96	0-105	6-10	87-145				1618	722	
V22AERD08-4035V900	HV22AERD-RS	22					0-3.53	0-125	6-10	87-145	71			1619	760	

After Coolers and Dryers for Vanes

CODE	MODEL
ATK-501BD-500	Aftercooler & dryer kit for 501PURS
ATK-502BD-500	Aftercooler & dryer kit for 502PURS
ATK-504BD-500	Aftercooler & dryer kit for 504PURS
ATK-5-500	Aftercooler kit for 501PURS/502PURS
ATK-504-500	Aftercooler kit for 504PURS

Notes

ONE STEP AHEAD **PORTABLE SCREW COMPRESSORS**

- Mobile compressed air solution
- Independent from power source
- Compact and lightweight
- Low emissions
- Easy to operate
- Energy efficient


CHAMPION
CMP-P14

DESIGNED FOR THE MOST DEMANDING CONDITIONS

Champion Portable Compressors

High-precision construction projects demand that the efficiency and reliability of compressors is of the highest calibre. Champion offers a wide range of portable compressors, with a reputation within the industry for just that – compressors that meet the requirements of numerous mobile compressed air applications.

The C-Series from Champion is constantly evolving and guarantees high energy efficiency, low emissions and many other innovations, which make daily operations and maintenance tasks much easier.

Engineering Excellence

Changing emission legislation is a key driver for development, but Champion's passionate engineering team also strive to achieve the best possible performance at the lowest operational costs. The C-Series of portable compressors fulfills the emission standards in accordance with the directive 97/68/EC. Additionally, the compressors are very compact and lightweight which is a preference for many customers.

AirPlus

Tailored compressor solutions to fit your application.

Champion offers numerous options and accessories allowing customers to configure the compressor according to the specific requirements of the application. Besides various components for air treatment, integrated generators, bunded bottom boxes, toolboxes, hose reels and integrated oilers, etc. can all be factory fitted.

Champion Genuine Parts

Enjoy complete peace of mind.

Genuine Champion parts and lubricants ensure best performance and reliability is maintained.

- Minimum losses contributing to energy savings
- Long service life, even under harsh conditions
- High reliability

DESIGNED TO LAST

At a glance...

Nominal Pressure
6 - 7 bar g

Motor Power
6.3 - 8.7 kW

Volume Flow
0.8 - 1.2 m³/min

Compressor

The Champion range of self-contained compressors uses lubricated screw air ends with high airflow. The progressive adjustment of the airflow constantly maintains an operating pressure between 7 and 8 bar, thus avoiding the use of a cumbersome air tank.

Protection

The "ROLL BAR" system fully protects the compressor and facilitates maintenance. The anti-vibration pads provide excellent stability and limit vibration.

Thermic engine

Our choice of HONDA petrol engines, known for their high reliability and excellent sound levels, guarantees the longevity of our compressors and a great ease of use. The engine speed is reduced automatically when the compressor is not stressed (control valve + pneumatic jack group).

Oil Separator

Our compressors are equipped with an oil mist separator that guarantees excellent air quality.

Cooling

Our compressors are equipped with an improved cooling system. Temperature control guarantees optimum longevity.

Portable Compressors

CMP Series P6 - B9

Design: Engine Driven Rotary Screw
Pressure Range: 6 - 7 bar
Power Range: 9 - 13 HP
Mobile Fuel Tank: 5.3 - 6.1 Litres

MODEL	FLOW[1]			ADJUSTMENT PRESSURE[3]	HONDA PETROL ENGINE		ELECTRIC START-UP BATTERY INCLUDED	PROGRESSIVE ADJUSTMENT OF ENGINE SPEED	SOUND POWER LEVEL LwA[2]	MOBILE FUEL TANK	DIMENSIONS	WEIGHT	CODE
	L/M	CFM	m³/min	BAR	kW/HP	MODEL		RPM	dB(A)	LITRES	MM	KG	
CMP-P6R	800	28	0.8	6	6.3/9	GX 270	-	2500 - 3500	97	5.3	820x560x610	69	CC1198063
CMP-P6	800	28	0.8	7	6.3/9	GX 270	Yes	2500 - 3500	97	5.3	820x560x610	79	CC1198074
CMP-P7R	1200	42	1.2	7	8.7/13	GX 390	-	2400 - 3500	97	6.1	820x560x610	80	CC1198075
CMP-P7	1200	42	1.2	7	8.7/13	GX 390	Yes	2400 - 3500	97	6.1	820x560x610	90	CC1198076
CMP-P8R	800	28	0.8	6	6.3/9	GX 270	-	2500 - 3500	97	5.3	820x560x610	79	CC1198077
CMP-P8	800	28	0.8	7	6.3/9	GX 270	Yes	2500 - 3500	97	5.3	820x560x610	89	CC1198078
CMP-P9R	800	28	0.8	7	8.7/13	GX 390	-	2400 - 3500	97	6.1	820x560x610	100	CC1198079
CMP-P9	1200	42	1.2	7	8.7/13	GX 390	Yes	2400 - 3500	97	6.1	820x560x610	110	CC1198080
CMP-B8	800	28	0.8	7	6.3/9	GX 270	Yes	2500 - 3500	97	5.3	740x540x530	59	CC1198081
CMP-B9	1200	42	1.2	7	8.7/13	GX 390	Yes	2500 - 3500	97	6.1	740x540x530	65	CC1198082

[1] Flow according to CE standard 1217 Annex C. [2] Sound level according to EU 2000/14 Annexe 8. [3] Pressure of 9-12 bar available upon request
Option: Models P8-P9 - static version avaiable - kit consists of 4 AV mounts + 4 mounting plates for commercial vehicles

DESIGNED TO LAST

At a glance...

Operating Pressure
7 - 12 bar g

Motor Power
15.5 kW

Volume Flow
1.0 - 1.4m³/min

The CMP-Series is a powerful alternative to electrical tools

Small, compact and lightweight, at only 165kg weight with 1.4 m³/min at 7 bar. Perfect for a wide-range of repair and installation jobs.

Electric Start as Standard

Easy to start and flexible operation.

Honda GX 630V

Air cooled petrol engine.

Champion Genuine Parts

Enjoy complete peace of mind.

Genuine Champion parts and lubricants ensure best performance and reliability is maintained.

- Minimum losses contributing to energy savings
- Long service life, even under harsh conditions
- High reliability

CMP SERIES	TYPE	CMP-P10	CMP-P12	CMP-P14
CODE		A60141201	A60141001	A60140701
ENGINE		HONDA GX630	HONDA GX630	HONDA GX630
MOTOR POWER	[kW]	15.5	15.5	15.5
OPERATING PRESSURE	[bar g]	12	10	7
	[psi g]	174	145	102
VOLUME FLOW	[m³/min]	1.4	1.8	1.8
	[cfm]	50	64	64
ENGINE SPEED OFF LOAD	[rpm]	2200 - 3550		
SOUND POWER LEVEL [1)]	[LwA]	97 (dB)		
VOLUME FLOW	[m³/min]	1.0	1.4	1.4
	[cfm]	35	50	50
ENGINE SPEED OFF LOAD/ LOAD	[rpm]	2200 - 2900		
SOUND POWER LEVEL[1)]	[LwA]	93 (dB)		
AIR OUTLET SIZE		1" x 3/4"		
DIMENSIONS L X W X H	[mm]	890 x 635 x 670		
WEIGHT (WITHOUT FUEL)	[Kg]	150		

[1)] Legal Limiting values of EC directive acc to 2000/14/EC

SERVICE KITS	DESCRIPTIONS
CC1186378	600 hrs or 6 months compressor service kit C10-C14
CC1186379	Annual engine service kit C10-C14
SCU02000-5GT3	Lubricant (pack of 3 x 5L)

Champion codes relates to power sound level (LwA) of 97 decibels. Clearly mark on your order if the lower noise level of 93 decibels is required

Notes

COMPRESSED AIR TREATMENT

- Basic Principals
- Air Filters
- Refrigeration Dryers
- Adsorption Dryers
- Air Receiver Tanks
- Condensate Drains
- Oil / Water Separators

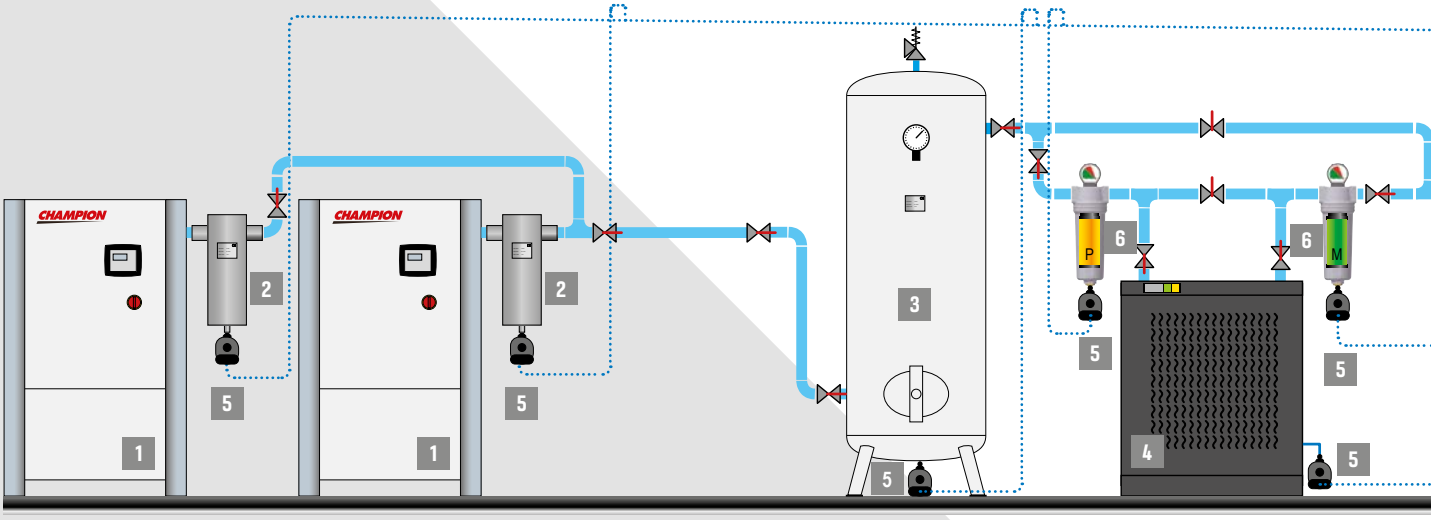
Compressed air quality classes according to ISO 8573-1:2010

CLASS	SOLID PARTICLES MAXIMUM NUMBER OF PARTICLES PER CUBIC METER AS A FUNCTION OF PARTICLE SIZE, D[2]			HUMIDITY AND LIQUID WATER PRESSURE DEW POINT		OIL CONCENTRATION OF TOTAL OIL[2] (LIQUID, AEROSOL AND VAPOUR)	
	[0.1 µm < d ≤ 0.5 µm]	[0.5 µm < d ≤ 1.0 µm]	[1.0 µm < d ≤ 5.0 µm]	[°C]	[°F]	[mg/m³]	[ppm / w / w]
0	As specified by the equipment user or supplier and more stringent than class[1]						
1	≤ 20,000	≤ 400	≤ 10	≤ -70	-94	≤ 0.01	≤ 0.008
2	≤ 400,000	≤ 6,000	≤ 100	≤ -40	-40	≤ 0.1	≤ 0.08
3	Not specified	≤ 90,000	≤ 1,000	≤ -20	-4	≤ 1	≤ 0.8
4	Not specified	Not specified	≤ 10,000	≤ +3	38	≤ 5	≤ 4
5	Not specified	Not specified	≤ 100,000	≤ +7	45	Not specified	Not specified
6				≤ ±10	50		

	MASS CONCENTRATION[2] - C_p [mg/m³]	LIQUID WATER CONTENT[2] - C_W [g/m³]		
6	$0 < C_p \leq 5$		Not specified	Not specified
7	$5 < C_p \leq 10$	$C_W \leq 0.5$	Not specified	Not specified
8	Not specified	$0.5 \leq C_W \leq 5$	Not specified	Not specified
9	Not specified		Not specified	Not specified
X	$C_p > 10$		> 5	> 4

[1] To qualify for a class designation, each size range and particle number within a class shall be met.
[2] At reference conditions: air temperature of 20° C, absolute air pressure of 100 kPa (1 bar), 0 relative water vapour pressure.

BASIC PRINCIPLES OF MOST TYPICAL COMPRESSED AIR APPLICATION



1. Compressor: The basic working principle of an air compressor is to compress atmospheric air, which is then used as per the requirements. In the process, atmospheric air is drawn in through an intake valve; more and more air is pulled inside a limited space mechanically by means of piston, impeller, or vane.

Since the amount of pulled atmospheric air is increased in the receiver or storage tank, volume is reduced and pressure is raised automatically. In simpler terms, free or atmospheric air is compressed after reducing its volume and at the same time, increasing its pressure.

Champion can provide many types of compressor to suit your needs.

2. Cyclone condensate separator: Cyclone condensate separators use centrifugal motion to force liquid water out of compressed air.

The spinning causes the condensate to join together on the centrifugal separators walls when the condensate gains enough mass it falls to the bottom of the separators bowl where it pools in the sump until it is flushed out of the system by the automatic float drain valve.

They are installed following aftercoolers to remove the condensed moisture.

3. Pressure vessel: Pressure vessel plays very important role in compressed air system:

- Damping pulsations caused by reciprocating compressors
- Providing a location for free water and lubricant to settle from the compressed air stream
- Supplying peak demands from stored air without needing to run an extra compressor
- Reducing load/unload or start/stop cycle frequencies to help screw compressors run more efficiently and reduce motor starts
- Slowing system pressure changes to allow better compressor control and more stable system pressures

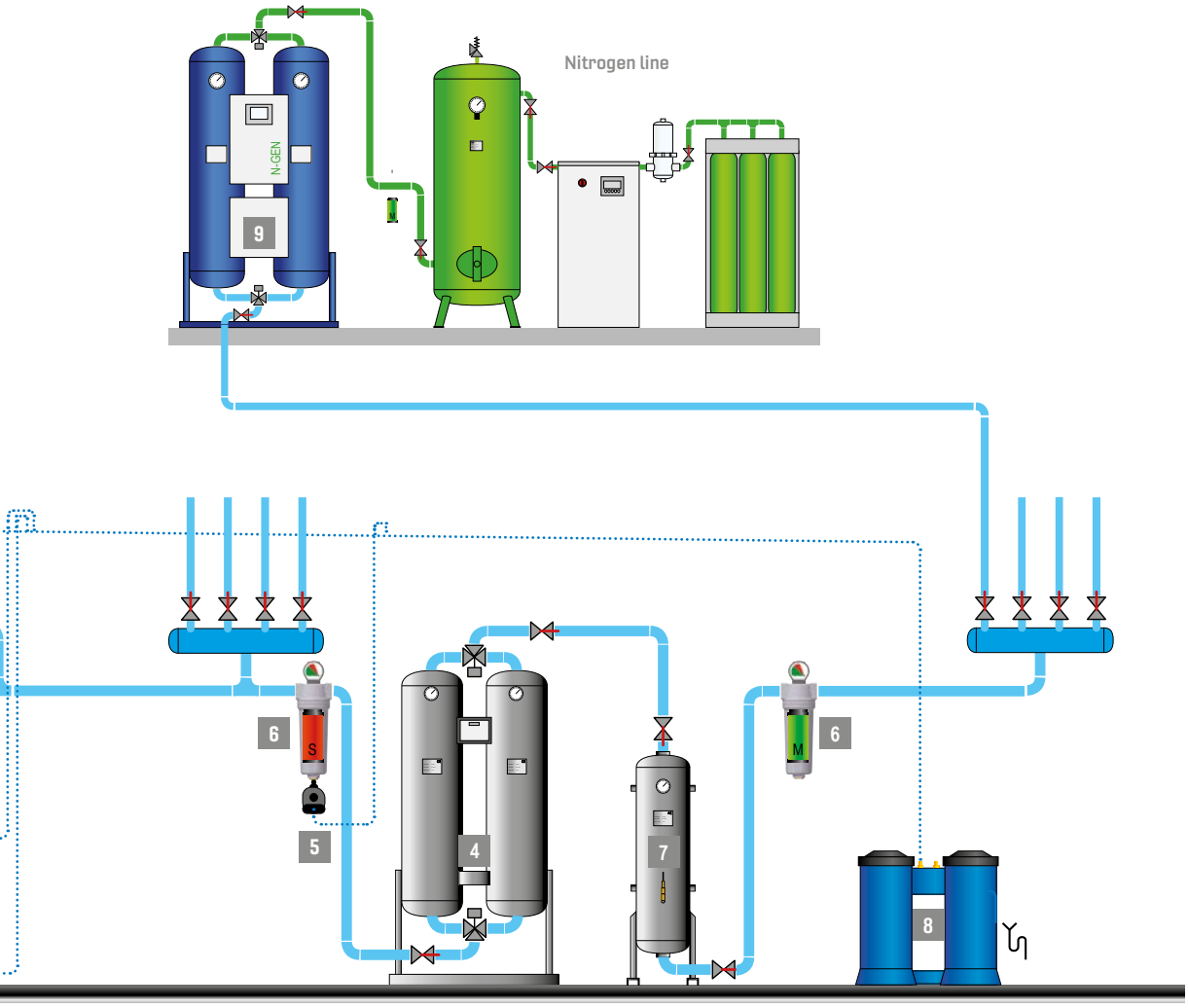
4. Compressed air dryer : Compressed air leaving the compressor aftercooler and moisture separator is normally warmer than the ambient air and fully saturated with moisture. As the air cools the moisture will condense in the compressed air lines. Excessive entrained moisture can result in undesired pipe corrosion and contamination at point of end use.

For this reason some sort of air dryer is normally required.

Some end use applications require very dry air, such as compressed air distribution systems where pipes are exposed to winter conditions. Drying the air to dew points below ambient conditions is necessary to prevent ice buildup.

Common types:

- Refrigerant
- Dessicant
- Membrane



5. Condensate drain: Drains are needed at all separators, filters, dryers and receivers in order to remove the liquid condensate from the compressed airsystem.

Failed drains can allow slugs of moisture to flow downstream that can overload the air dryer and foul end use equipment.

6. Filter: Compressed air filters are used for high efficient removal of solid particles, water, oil aerosols, hydrocarbons, odour and vapours from compressed air systems.

To meet the required compressed air quality appropriate filter element must be installed into filter housing.

7. Activated carbon tower: Activated carbon tower eliminates hydrocarbon vapours and odours from compressed air. Towers are filled with activated carbon adsorbent that adsorbs contaminants onto the surface of its internal pores. Activated carbon towers are used at applications where content of oil vapours needs to be reduced to minimum.

Activated carbon towers can be incorporated in existing compressed air systems significantly minimising the risks of contamination.

They are able to absorb oil carry-over (both liquid and vapour) to provide the plant with technically oil-free compressed air.

8. Oil/water separator: Local environmental laws and regulations state that condensate drained from compressed air systems cannot be returned to the sewage system due to the content of compressor lubricating oil. Water/oil separators are one of the most efective and economical solution. Multi-stage separation process using oleophilic filters and activated carbon, ensures exceptional performance and trouble free operation.

9. Nitrogen generator: The nitrogen generators extract the available nitrogen in the ambient air from the other gases by applying the Pressure Swing Adsorption (PSA) technology. During the PSA process compressed, cleaned ambient air is led to a molecular sieve bed, which allows the nitrogen to pass through as a product gas, but adsorbs other gases.

End user advice

- Replace inappropriate end use applications with efficient models (vortex nozzles, atomizers)
- Install a flow controller to lower plant pressure and reduce artificial demand caused by higher than required pressures
- Turn off air consuming equipment, using electric solenoids or manual shutoff valves
- Avoid operation of air tools without a load, as this consumes more air than a tool under load
- Replace worn tools, as they often require higher pressure and consume excess compressed air than tools in good shape
- Lubricate air tools as recommended by the manufacturer. Keep air used by all end uses free of condensate in order to maximise tool life and effectiveness
- Where possible and practical, group end use air equipment that has similar air requirements of pressure and air quality

At a glance...

Nominal Pressure
17 bar

Connections
3/8" - 3"

Volume Flow
18 - 18247 cfm

ALUMINUM COMPRESSED AIR FILTERS **CHF SERIES**

The reliability of compressed air filtration is paramount to the ongoing fight against problems caused through contamination entering the air system. Contamination in the form of dirt, oil and water can lead to:

- Pipescale and corrosion within pressure vessels
- Damage to production equipment, air motors, air tools, valves and cylinders
- Premature and unplanned desiccant replacement for adsorption dryers
- Spoiled product

The Champion filtration range offers various products and grades of filtration to provide peace of mind whatever the air quality requirement. It has been designed with focus on reliability and efficiency.

Designed and Built for Exceptional Performance

The advanced compressed air filter range from Champion reduces contamination in your air stream to help protect your critical processes and valuable equipment.

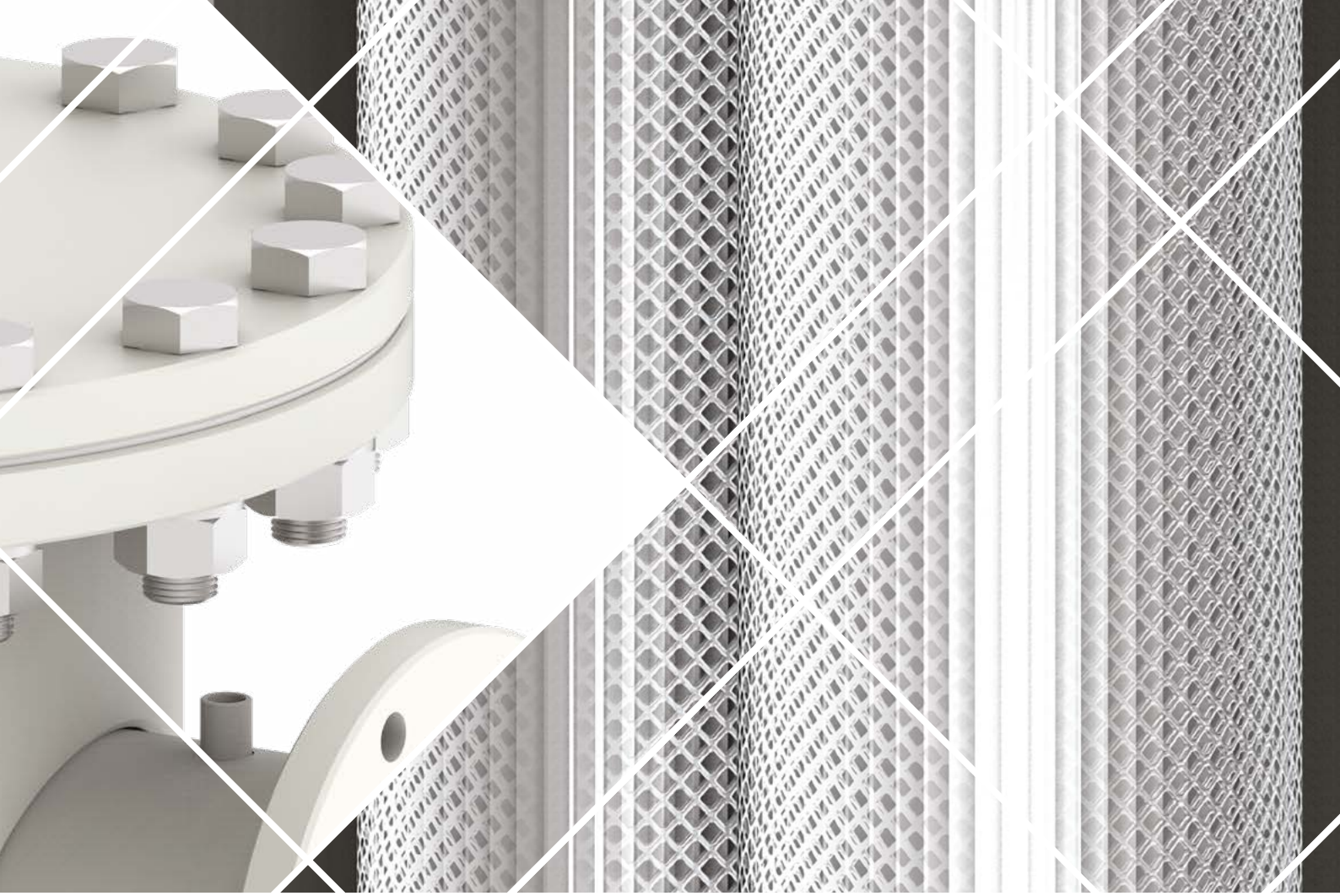
These filters are rigorously tested and engineered with superior components to provide years of reliable performance and consistently high-quality air.

The standard for high-quality air

The Champion filter range provides clean, high-quality air as defined by ISO 8573.1:2010 and are certified by a third party under ISO 12500-1.

Applications

- General industrial applications
- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint



Compressed Air Purification -
The perfect choice!

Water Separation – The CHF Range of water separators

The CHF-range of water separators provide bulk condensed water and liquid oil removal and are used to protect coalescing filters against bulk liquid contamination.

0.5 – 200 m³/min*

18 – 7062 cfm*

Filtration – The CHF Range of compressed air filters

The CHF-range of filters efficiently removes water and oil aerosols, atmospheric dirt and solid particles, rust, pipescale and micro-organisms.

0.5 – 45 m³/min*

18 – 1600 cfm*

Compressed air contamination will ultimately lead to:

- **Inefficient production processes**
- **Spoiled, damaged or reworked products**
- **Reduced production efficiency**
- **Increased manufacturing costs**

Filtration – The CHF Range of flanged filters**

For larger flowrate or higher pressure applications the flanged filters are available in the standard four filtration grades.

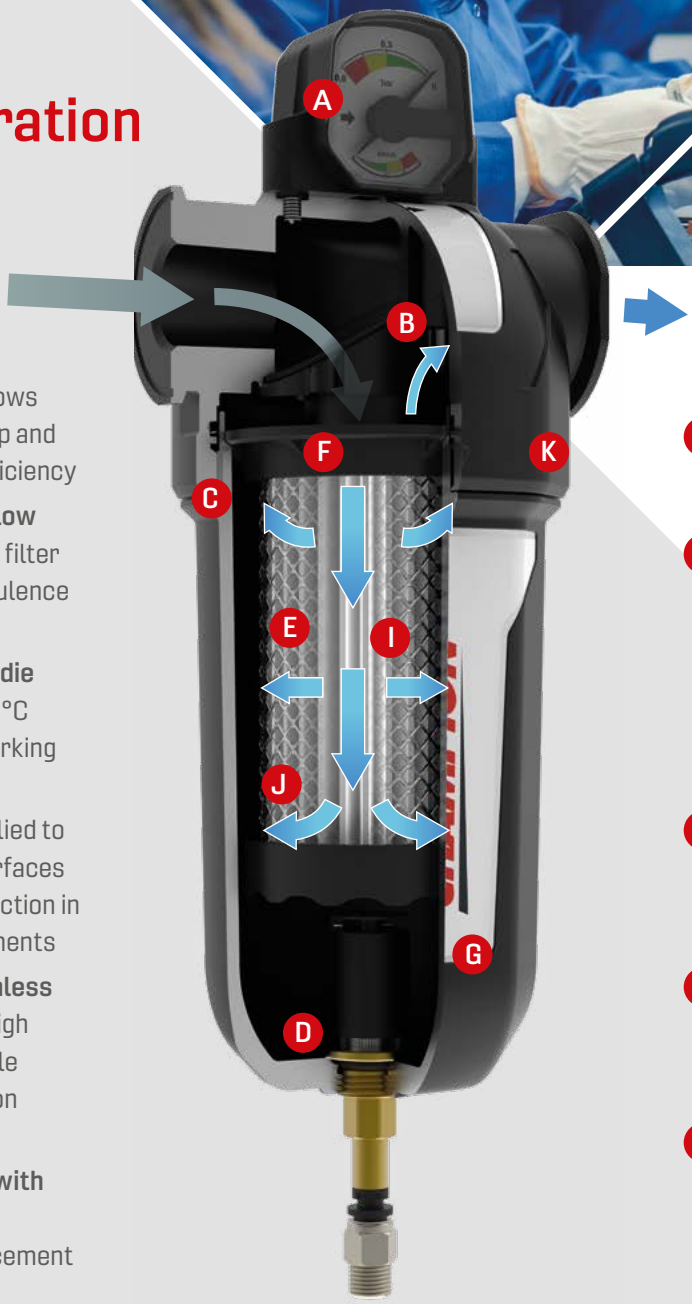
48 – 516 m³/min*

1702 – 18247 cfm*

* Flow rate at 20° C, 7 bar

** On request

Superior Filtration Technology



- **A** **Patented dual indicator (optional accessory)** shows differential pressure drop and economical operating efficiency
- **B** **Patented smooth bore flow insert** directs air into the filter element, minimising turbulence and pressure losses
- **C** **All-aluminum, precision die cast body** suitable for 80°C and 17 bar g maximum working pressure applications
- **D** **Proprietary coating** applied to the inside and outside surfaces provides corrosion protection in harsh industrial environments
- **E** **Filter element with stainless steel mesh** withstands high differential pressure while minimizing flow restriction through the element
- **F** **Ergonomic bowl design with no-touch filter element** simplifies element replacement
- **G** **Time strip label indicates** when it's time to change the element (CHF Grade only)
- **H** **Reliable discharge** The M and S grade filters and water separators are equipped with internal float drain. The Particulate (R) and Activated Carbon (A) filters have manual drain
- **I** **Deep-pleated filter media** reduces air flow velocity to maximise filtration efficiency and minimise pressure losses
- **J** **High-efficiency drainage layer** improves liquid drainage properties and enhances chemical compatibility
- **K** **Simple visual alignment** of the filter head and bowl ensures accurate assembly of components and helps to improve safety

High efficiency bulk liquid removal

Water separators remove bulk liquids such as condensate, water and liquid oil from the air flow through directional and centrifugal separation. Installed before a coalescing filter the water separator can provide added protection against bulk liquid contamination enabling the filter to operate more efficiently.

The CHF Series water separator range from Champion can operate across various flow conditions and have been optimised to reduce differential pressure with very low maintenance.

Technical data

Compressed Air Condensate Separators - CHF Series

SEPARATOR MODEL	CHAMPION PART NUMBER CCN	CONNECTION SIZE	FLOW RATE		MAX. PRESSURE		DIMENSIONS [MM]		WEIGHT
			m³/min	cfm	bar	psi	W	H	kg
CHF005W	47700907001	3/8"	0.50	18	17	250	76	175	0.6
CHF007W	47700908001	1/2"	0.66	23	17	250	76	175	0.6
CHF018W	47700909001	3/4"	1.8	64	17	250	98	230	1.2
CHF040W	47700910001	1"	4.0	141	17	250	129	268	2.2
CHF085W	47700911001	1 1/2"	8.5	300	17	250	129	268	2.1
CHF170W	47700912001	2"	17.0	600	17	250	170	467	5.1
CHF380W	47700913001	3"	38.0	1342	17	250	205	548	20

Compressed Air Filters CHF Series - Grade M

FILTER MODEL	CHAMPION PART NUMBER CCN	CONNECTION SIZE	FLOW RATE		MAX. PRESSURE		DIMENSIONS [MM]		WEIGHT
			m³/min	cfm	bar	psi	W	H	kg
CHF005LM	47698906001	3/8"	0.5	18	17	250	76	225	0.55
CHF007LM	47698907001	1/2"	0.7	24	17	250	76	225	0.55
CHF013LM	47698908001	3/4"	1.3	44	17	250	98	280	1.07
CHF018LM	47698909001	3/4"	1.8	65	17	250	98	280	1.09
CHF025LM	47698910001	1"	2.5	88	17	250	129	319	2.06
CHF032LM	47698911001	1"	3.2	112	17	250	129	319	2.06
CHF038LM	47698912001	1"	3.8	135	17	250	129	319	2.06
CHF067LM	47698913001	1 1/2"	6.7	235	17	250	129	409	2.36
CHF082LM	47698914001	1 1/2"	8.2	288	17	250	129	409	2.36
CHF100LM	47698915001	2"	10	353	17	250	170	518	5.2
CHF0133LM	47698916001	2"	13.3	471	17	250	170	518	5.24
CHF0167LM	47698917001	2"	16.7	589	17	250	170	518	5.26
CHF0200LM	47698918001	3"	20	706	17	250	205	600	9.31
CHF0260LM	47698919001	3"	26	918	17	250	205	700	10.69
CHF0305LM	47698920001	3"	30.5	1077	17	250	205	700	10.69
CHF0383LM	47698921001	3"	38.3	1354	17	250	205	930	13.7
CHF0450LM	47698922001	3"	45	1589	17	250	205	930	13.7

Compressed Air Filters CHF Series - Grade S

FILTER MODEL	CHAMPION PART NUMBER CCN	CONNECTION SIZE	FLOW RATE		MAX. PRESSURE		DIMENSIONS [MM]		WEIGHT
			m³/min	cfm	bar	psi	W	H	kg
CHF005LS	47698923001	3/8"	0.5	18	17	250	76	225	0.55
CHF007LS	47698924001	1/2"	0.7	24	17	250	76	225	0.55
CHF013LS	47698925001	3/4"	1.3	44	17	250	98	280	1.07
CHF018LS	47698926001	3/4"	1.8	65	17	250	98	280	1.09
CHF025LS	47698927001	1"	2.5	88	17	250	129	319	2.06
CHF032LS	47698928001	1"	3.2	112	17	250	129	319	2.06
CHF038LS	47698929001	1"	3.8	135	17	250	129	319	2.06
CHF067LS	47698930001	1 1/2"	6.7	235	17	250	129	409	2.36
CHF082LS	47698931001	1 1/2"	8.2	288	17	250	129	409	2.36
CHF100LS	47698932001	2"	10	353	17	250	170	518	5.2
CHF0133LS	47698933001	2"	13.3	471	17	250	170	518	5.24
CHF0167LS	47698934001	2"	16.7	589	17	250	170	518	5.26
CHF0200LS	47698935001	3"	20	706	17	250	205	600	9.31
CHF0260LS	47698936001	3"	26	918	17	250	205	700	10.69
CHF0305LS	47698937001	3"	30.5	1077	17	250	205	700	10.69
CHF0383LS	47698938001	3"	38.3	1354	17	250	205	930	13.7
CHF0450LS	47698939001	3"	45	1589	17	250	205	930	13.7

Compressed Air Filters CHF Series - Grade A

FILTER MODEL	CHAMPION PART NUMBER CCN	CONNECTION SIZE	FLOW RATE		MAX. PRESSURE		DIMENSIONS [MM]		WEIGHT
			m³/min	cfm	bar	psi	W	H	kg
CHF005LA	47698957001	3/8"	0.5	18	17	250	76	225	0.55
CHF007LA	47698958001	1/2"	0.7	24	17	250	76	225	0.55
CHF013LA	47698959001	3/4"	1.3	44	17	250	98	280	1.07
CHF018LA	47698960001	3/4"	1.8	65	17	250	98	280	1.09
CHF025LA	47698961001	1"	2.5	88	17	250	129	319	2.06
CHF032LA	47698962001	1"	3.2	112	17	250	129	319	2.06
CHF038LA	47698963001	1"	3.8	135	17	250	129	319	2.06
CHF067LA	47698964001	1 1/2"	6.7	235	17	250	129	409	2.36
CHF082LA	47698965001	1 1/2"	8.2	288	17	250	129	409	2.36
CHF100LA	47698966001	2"	10	353	17	250	170	518	5.2
CHF0133LA	47698967001	2"	13.3	471	17	250	170	518	5.24
CHF0167LA	47698968001	2"	16.7	589	17	250	170	518	5.26
CHF0200LA	47698969001	3"	20	706	17	250	205	600	9.31
CHF0260LA	47698970001	3"	26	918	17	250	205	700	10.69
CHF0305LA	47698971001	3"	30.5	1077	17	250	205	700	10.69
CHF0383LA	47698972001	3"	38.3	1354	17	250	205	930	13.7
CHF0450LA	47698973001	3"	45	1589	17	250	205	930	13.7

Compressed Air Filters CHF Series - Grade R

FILTER MODEL	CHAMPION PART NUMBER CCN	CONNECTION SIZE	FLOW RATE		MAX. PRESSURE		DIMENSIONS [MM]		WEIGHT
			m³/min	cfm	bar	psi	W	H	kg
CHF005LR	47698940001	3/8"	0.5	18	17	250	76	225	0.55
CHF007LR	47698941001	1/2"	0.7	24	17	250	76	225	0.55
CHF013LR	47698942001	3/4"	1.3	44	17	250	98	280	1.07
CHF018LR	47698943001	3/4"	1.8	65	17	250	98	280	1.09
CHF025LR	47698944001	1"	2.5	88	17	250	129	319	2.06
CHF032LR	47698945001	1"	3.2	112	17	250	129	319	2.06
CHF038LR	47698946001	1"	3.8	135	17	250	129	319	2.06
CHF067LR	47698947001	1 1/2"	6.7	235	17	250	129	409	2.36
CHF082LR	47698948001	1 1/2"	8.2	288	17	250	129	409	2.36
CHF100LR	47698949001	2"	10	353	17	250	170	518	5.2
CHF0133LR	47698950001	2"	13.3	471	17	250	170	518	5.24
CHF0167LR	47698951001	2"	16.7	589	17	250	170	518	5.26
CHF0200LR	47698952001	3"	20	706	17	250	205	600	9.31
CHF0260LR	47698953001	3"	26	918	17	250	205	700	10.69
CHF0305LR	47698954001	3"	30.5	1077	17	250	205	700	10.69
CHF0383LR	47698955001	3"	38.3	1354	17	250	205	930	13.7
CHF0450LR	47698956001	3"	45	1589	17	250	205	930	13.7

Grade M - General Purpose Protection

Particle removal down to 0.1 micron including coalesced liquid, water and oil, providing a maximum remaining oil aerosol content of 0.03 mg/m³ @ 21°C

Grade S - High Efficiency Oil Removal Filtration

Particle removal down to 0.01 micron including water and oil aerosols, providing a maximum remaining oil aerosol content of 0.01 mg/m3 @ 21°C (Precede with Grade M filter)

Grade A - Activated Carbon Filtration

Oil vapor and hydrocarbon odor removal, providing a maximum remaining oil content of <0.003 mg/m³ (<0.003 ppm) @ 21°C (Precede with Grade S filter)

Grade R - General Purpose Dust Filtration

Dust particle removal down to 1 micron

Operating Limitations:

Max Operating Pressure 17.2 bar g

Max Recommended Operating Temp 80°C (Grade M, S, R)

Max Recommended Operating Temp 50°C (Grade A)

Min Recommended Operating Temp 1°C

LINE PRESSURE	bar g	1	2	3	5	7	9	11	13	15	17
CORRECTION FACTOR		0.38	0.53	0.65	0.85	1.00	1.13	1.25	1.36	1.46	1.56

To use correction factors, multiply the filter's capacity by the correction factor to get the new filter flow capacity at the non-standard operating pressure. For example, a 190 m³/h filter operating at 11 bar has a correction factor of 1.25. 1.25 x 190 = 237.5 m³/h capacity at 11 bar.

Technical data

Compressed Air Filter Elements CHF Series - Grade M

FILTER MODEL	FILTER ELEMENT
CHF005LM	47699428001
CHF007LM	47699432001
CHF013LM	47699436001
CHF018LM	47699440001
CHF025LM	47699444001
CHF032LM	47699448001
CHF038LM	47699452001
CHF067LM	47699456001
CHF082LM	47699460001
CHF100LM	47699464001
CHF0133LM	47699468001
CHF0167LM	47699472001
CHF0200LM	47699476001
CHF0260LM	47700081001
CHF0305LM	47700085001
CHF0383LM	47700089001
CHF0450LM	47700093001

Compressed Air Filter Elements CHF Series - Grade A

FILTER MODEL	FILTER ELEMENT
CHF005LA	47699431001
CHF007LA	47699435001
CHF013LA	47699439001
CHF018LA	47699443001
CHF025LA	47699447001
CHF032LA	47699451001
CHF038LA	47699455001
CHF067LA	47699459001
CHF082LA	47699463001
CHF100LA	47699467001
CHF0133LA	47699471001
CHF0167LA	47699475001
CHF0200LA	47700080001
CHF0260LA	47700084001
CHF0305LA	47700088001
CHF0383LA	47700092001
CHF0450LA	47700096001

Compressed Air Filter Elements CHF Series - Grade S

FILTER MODEL	FILTER ELEMENT
CHF005LS	47699429001
CHF007LS	47699433001
CHF013LS	47699437001
CHF018LS	47699441001
CHF025LS	47699445001
CHF032LS	47699449001
CHF038LS	47699453001
CHF067LS	47699457001
CHF082LS	47699461001
CHF100LS	47699465001
CHF0133LS	47699469001
CHF0167LS	47699473001
CHF0200LS	47700078001
CHF0260LS	47700082001
CHF0305LS	47700086001
CHF0383LS	47700090001
CHF0450LS	47700094001

Compressed Air Filter Elements CHF Series - Grade R

FILTER MODEL	FILTER ELEMENT
CHF005LR	47699430001
CHF007LR	47699434001
CHF013LR	47699438001
CHF018LR	47699442001
CHF025LR	47699446001
CHF032LR	47699450001
CHF038LR	47699454001
CHF067LR	47699458001
CHF082LR	47699462001
CHF100LR	47699466001
CHF0133LR	47699470001
CHF0167LR	47699474001
CHF0200LR	47700079001
CHF0260LR	47700083001
CHF0305LR	47700087001
CHF0383LR	47700091001
CHF0450LR	47700095001

Notes

At a glance...

Operating Pressure
14/16 bar

Ambient temperature
25°C (45° max)

Inlet air temperature
35°C (55° max)

Applications

- Compressed air systems

REFRIGERATION AIR DRYERS
CHF SERIES

The advanced design and innovative technology offered by CHR Series refrigeration dryers provides an optimised performance alongside a more efficient mode of management.

The electronic controller, complete with user-friendly interface, has been simplified to focus on the essential functions of operation and regulation, including the unique fan control (CHR6 – CHR167).

Simplicity in design, unrivalled reliability, and extraordinary value for money are the core strengths of this new family of units.

Standard voltage

- CHR6 – CHR36: 230V/1ph/50-60Hz
- CHR47 – CHR167: 230V/1ph/50Hz
- CHR217 – CHR350: 400V/3ph/50Hz

Available options

- Non-standard voltages
  CHR47 – CHR125 are available with 230V/1ph/60Hz
  CHR217 is available with 460V/3ph/60Hz
- All models are available with NPT connections

Main design features

Variable speed fan

The only one in the market to offer a complete control of the dew point through the variable speed fan controlled by the microprocessor. Thanks to this solution we've eliminated the hot gas bypass valve and the fan pressure switch, critical components for the defects of this type of machines.

Multi-function control panel

It offers a wide range of parameters and alarms such as: high temperature, low temperature (antifreeze), probe failure, alarm history, etc.

New heat exchangers

Completely designed in our laboratories to guarantee the desired level of performances with the lowest pressure drop.

Energy saving and antifreeze mode

The compressor stops in case of low load and ambient temperature below 15 °C.

Compact and simple design

Sheet metal panels and internal components designed in order to reduce costs during assembly, maintaining the high quality guaranteed by Champion.

For higher capacities up to 45 m³/min (2,700 m³/h) please contact the Champion Sales Team

DRYER	PART NO	AIR FLOW CLASS 5		ABSORBED POWER	POWER SUPPLY	MAX PRESSURE	AIR CONNECTIONS	REFRIGERANT	DIMENSIONS [MM]		
		m³/h	m³/min	kW	V/PH/HZ	bar g	BSP		W	D	H
CHR6	47703069001	36	0.60	0.12	230/1/50-60	16	3/8"	R513A	305	360	408
CHR9	47703070001	54	0.90	0.17	230/1/50-60	16	1/2"	R513A	325	430	445
CHR12	47703071001	72	1.20	0.17	230/1/50-60	16	1/2"	R513A	325	430	445
CHR18	47703072001	108	1.80	0.29	230/1/50-60	16	1/2"	R513A	325	430	445
CHR24	47703073001	144	2.40	0.41	230/1/50-60	16	3/4"	R513A	395	486	565
CHR30	47703074001	180	3.00	0.47	230/1/50-60	16	3/4"	R513A	395	486	565
CHR36	47703075001	216	3.60	0.61	230/1/50-60	16	3/4"	R513A	395	486	565
CHR47	47703076001	280	4.67	0.6	230/1/50	16	1"	R407C	485	595	614
CHR57	47703077001	340	5.67	0.6	230/1/50	16	1"	R407C	485	595	614
CHR83	47703078001	500	8.33	0.9	230/1/50	16	1-1/2"	R407C	500	660	970
CHR102	47703079001	610	10.17	0.9	230/1/50	16	1-1/2"	R407C	500	660	970
CHR125	47703080001	750	12.50	1.23	230/1/50	14	2"	R407C	520	800	1195
CHR167	47703081001	1000	16.67	1.43	230/1/50	14	2-1/2"	R407C	520	835	1195
CHR217	47703082001	1300	21.67	2.14	400/3/50	14	2-1/2"	R407C	520	835	1230

DRYER	PART NO	AIR FLOW CLASS 4		ABSORBED POWER	POWER SUPPLY	MAX PRESSURE	AIR CONNECTIONS	REFRIGERANT	DIMENSIONS [MM]		
		m³/h	m³/min	kW	V/PH/HZ	bar g	BSP		W	D	H
CHR216 - SD	47888722001	1300	21.67	2.17	400/3/50	14	3"	R513A	806	1012	1539
CHR250 - SD	47888723001	1500	25.00	2.51	400/3/50	14	3"	R513A	806	1012	1539
CHR300 - SD	47850307001	1800	30.00	3.01	400/3/50	14	3"	R513A	806	1012	1539
CHR375 - SD	47850308001	2250	37.50	3.65	400/3/50	14	3"	R513A	806	1012	1539
CHR433 - SD	47850309001	2600	43.33	4.22	400/3/50	14	3"	R513A	806	1012	1539
CHR533 - SD	47850310001	3200	53.33	6.31	400/3/50	14	DN150 PN16	R513A	880	1819	1796
CHR700 - SD	47850311001	4200	70.00	5.96	400/3/50	14	DN150 PN16	R513A	880	1819	1796
CHR800 - SD	47850312001	4800	80.00	6.81	400/3/50	14	DN150 PN16	R513A	880	1819	1796
CHR900 - SD	47850313001	5400	90.00	10.9	400/3/50	13	DN150 PN16	R513A	1510	1500	1555

DRYER	PART NO	AIR FLOW		ABSORBED POWER	POWER SUPPLY	MAX PRESSURE	AIR CONNECTIONS	REFRIGERANT	DIMENSIONS [MM]		
		m³/h	m³/min	kW	V/PH/HZ	bar g	BSP		W	D	H
CHR6 - NLD	47703438001	36	0.60	0.12	230/1/50-60	16	3/8"	R513A	305	360	408
CHR9 - NLD	47703439001	54	0.90	0.17	230/1/50-60	16	1/2"	R513A	325	430	445
CHR12 - NLD	47703440001	72	1.20	0.17	230/1/50-60	16	1/2"	R513A	325	430	445
CHR18 - NLD	47703441001	108	1.80	0.29	230/1/50-60	16	1/2"	R513A	325	430	445
CHR24 - NLD	47703442001	144	2.40	0.41	230/1/50-60	16	3/4"	R513A	395	486	565
CHR30 - NLD	47703443001	180	3.00	0.47	230/1/50-60	16	3/4"	R513A	395	486	565
CHR36 - NLD	47703444001	216	3.60	0.61	230/1/50-60	16	3/4"	R513A	395	486	565
CHR47 - NLD	47703445001	280	4.67	0.6	230/1/50	16	1"	R407C	485	595	614
CHR57 - NLD	47703446001	340	5.67	0.6	230/1/50	16	1"	R407C	485	595	614
CHR83 - NLD	47703447001	500	8.33	0.9	230/1/50	16	1-1/2"	R407C	500	660	970
CHR102 - NLD	47703448001	610	10.17	0.9	230/1/50	16	1-1/2"	R407C	500	660	970
CHR125 - NLD	47703449001	750	12.50	1.23	230/1/50	14	2"	R407C	520	800	1195
CHR167 - NLD	47703450001	1000	16.67	1.43	230/1/50	14	2-1/2"	R407C	520	835	1195
CHR217 - NLD	47703451001	1300	21.67	2.14	400/3/50	14	2-1/2"	R407C	520	835	1230

Timer drain as standard, electronic No Loss Drain (NLD) option on request on Models CHR6 - CHR217. Integrated Smart Drain (SD) as standard on Models CHR216 - CHR900.

CORRECTION FACTORS FOR OPERATING PRESSURE											
OPERATING PRESSURE [bar]	3	4	5	6	7	8	9	10	11	12	13
CORRECTION FACTOR K1	0.70	0.78	0.85	0.93	1.00	1.06	1.11	1.15	1.18	1.20	1.22

CORRECTION FACTORS FOR INLET AIR TEMPERATURE CHANGES						
TEMPERATURE [°C]	30	35	40	45	50	55
CORRECTION FACTOR K2	1.20	1.00	0.85	0.71	0.58	0.49

CORRECTION FACTORS FOR AMBIENT CHANGES						
TEMPERATURE [°C]	25	30	35	40	42	45
CORRECTION FACTOR K3	1.00	0.96	0.92	0.88	0.85	0.80

At a glance...

Operating Pressure
14 bar

Pressure Dew Points
-40°C (-25°C / -70°C)

Flow Rate
0.08 - 5.00 m³/min

MODULAR DESICCANT DRYERS

A-Series modular compressed air dryers - a dedicated solution for every application

By combining the proven benefits of desiccant drying with modern design, Champion provides an extremely compact and reliable system to dry and clean compressed air efficiently.

At the heart of any compressed air treatment solution is the dryer, its purpose, to remove water vapour, stop condensation, corrosion and in the case of adsorption dryers, inhibit the growth of micro-organisms.

The Champion A-Series of heatless regenerative desiccant dryers have proven to be the ideal solution for many thousands of compressed air users worldwide in a wide variety of industries.

Advantages at a glance:

- Robust and reliable industry-proven design
- Suitable for all industries and applications - some desiccant dryer regeneration methods prevent their use in certain industries/applications
- Lower capital investment and reduced complexity compared to other dryer regeneration methods
- Lower maintenance costs in comparison to other dryer regeneration methods
- No heat, heaters, or heat-related issues

High air quality, low cost of ownership

Features are your benefits

High Air Quality:
Delivers ISO Class 2 or Class 1 pressure dew point air for critical applications; high efficiency pre and post-filters provide constant high air quality, protecting downstream air from contamination.

Superior Reliability:
Proven electronic control performance indicators, extruded aluminium with anodisation and epoxy painting, and NEMA 3/IP54 Protection (also suitable for outdoor installation) make desiccant dryers durable and high-strength.

Applications

- Automotive
- Food and beverage
- Pharmaceutical
- Chemical
- Oil & Gas

Total Cost of Investment:
Reduced cost of ownership with point of use design to treat only the required air, conservative pressure drop 0.2 Barg, and purge reduction on compressed air demand (on/off-load).

Ease of Use:
User-friendly electronic interface with alarm indicators available for models 40 and above. Models from 40 to 300 m³/h are equipped with the new touchscreen controller.

Serviceability:
Modular dryers feature an optimised design for simplified maintenance and preventative maintenance alerts (models 40 and above).

Compact & Flexible Solution:
Space-saving design for optimised installation with air inlet and outlet in the back of unit and connection piping can come from right or left. Model up to 0.42 m³/min can be wall-mounted or installed horizontally

Performance Improvement:
Extended rated pressure range from 4 to 14 Barg and increased airflow range coverage up to 300 m³/h. Guaranteed class 2 (-40°C) and optionally class 1 (-70°C) pressure dew point.

Longer Cycle Life:
Modular dryers have a longer cyle time, 10 minutes, than most competitors (4 to 8 minutes maximum).

CHA1M -40°C to CHA50M -40°C Series

TYPE	PART NO	CAPACITY			MAX PRESSURE		PRESSURE DEW POINT	AIR IN/OUT CONNECTION	POWER SUPPLY	DIMENSIONS [MM]			WEIGHT	DESICCANT PER TOWER
		m³/min	m³/h	SCFM	bar g	psig	°C	BSP (in)	V/Ph/Hz	W	D	H	kg	kg
CHA1 -40°C	47700856001	0.08	5	3	14	203	-40	3/8"	230/1/50-60	238	212	423	11	0.7
CHA3 -40°C	47700857001	0.25	15	9	14	203	-40	3/8"	230/1/50-60	238	212	823	18	2.2
CHA4 -40°C	47700858001	0.42	25	15	14	203	-40	3/8"	230/1/50-60	238	212	1073	27	3.0
CHA7 -40°C	47700859001	0.67	40	24	14	203	-40	3/4"	230/1/50-60	475	405	968	44	6.4
CHA9 -40°C	47700860001	0.92	55	32	14	203	-40	3/4"	230/1/50-60	475	405	1118	50	8.4
CHA12 -40°C	47700861001	1.17	70	41	14	203	-40	3/4"	230/1/50-60	475	405	1318	60	10.9
CHA17 -40°C	47700862001	1.67	100	59	14	203	-40	1"	230/1/50-60	475	405	1673	73	15.4
CHA25 -40°C	47700863001	2.50	150	88	14	203	-40	1"	230/1/50-60	475	405	1873	90	18.0
CHA33 -40°C	47700864001	3.33	200	118	14	203	-40	1 1/2"	230/1/50-60	536	495	1705	177	30.8
CHA42 -40°C	47700865001	4.17	250	147	14	203	-40	1 1/2"	230/1/50-60	536	495	1905	180	35.9
CHA50 -40°C	47700866001	5.00	300	177	14	203	-40	1 1/2"	230/1/50-60	536	495	1905	188	35.9

CHA7 -40°C DS to CHA50M -40°C ES Series

TYPE	PART NO	CAPACITY			MAX PRESSURE		PRESSURE DEW POINT	AIR IN/OUT CONNECTION	POWER SUPPLY	DIMENSIONS [MM]			WEIGHT	DESICCANT PER TOWER
		m³/min	m³/h	SCFM	bar g	psig	°C	BSP (in)	V/Ph/Hz	W	D	H	kg	kg
CHA7 -40°C ES	47700867001	0.67	40	24	14	203	-40	3/4"	230/1/50-60	475	405	968	44	6.4
CHA9 -40°C ES	47700868001	0.92	55	32	14	203	-40	3/4"	230/1/50-60	475	405	1118	50	8.4
CHA12 -40°C ES	47700869001	1.17	70	41	14	203	-40	3/4"	230/1/50-60	475	405	1318	60	10.9
CHA17 -40°C ES	47700870001	1.67	100	59	14	203	-40	1"	230/1/50-60	475	405	1673	73	15.4
CHA25 -40°C ES	47700871001	2.50	150	88	14	203	-40	1"	230/1/50-60	475	405	1873	90	18.0
CHA33 -40°C ES	47700872001	3.33	200	118	14	203	-40	1 1/2"	230/1/50-60	536	495	1705	177	30.8
CHA42 -40°C ES	47700873001	4.17	250	147	14	203	-40	1 1/2"	230/1/50-60	536	495	1905	180	35.9
CHA50 -40°C ES	47700874001	5.00	300	177	14	203	-40	1 1/2"	230/1/50-60	536	495	1905	188	35.9

CHA7 -70°C to CHA50M -70°C Series

TYPE	PART NO	CAPACITY			MAX PRESSURE		PRESSURE DEW POINT	AIR IN/OUT CONNECTION	POWER SUPPLY	DIMENSIONS [MM]			WEIGHT	DESICCANT PER TOWER
		m³/min	m³/h	SCFM	bar g	psig	°C	BSP (in)	V/Ph/Hz	W	D	H	kg	kg
CHA7 -70°C	47700875001	0.53	32	19	14	203	-70	3/4"	230/1/50-60	475	405	968	44	6.4
CHA9 -70°C	47700876001	0.73	44	26	14	203	-70	3/4"	230/1/50-60	475	405	1118	50	8.4
CHA12 -70°C	47700877001	0.93	56	33	14	203	-70	3/4"	230/1/50-60	475	405	1318	60	10.9
CHA17 -70°C	47700878001	1.33	80	47	14	203	-70	1"	230/1/50-60	475	405	1673	73	15.4
CHA25 -70°C	47700879001	2.00	120	71	14	203	-70	1"	230/1/50-60	475	405	1873	90	18.0
CHA33 -70°C	47700880001	2.67	160	94	14	203	-70	1 1/2"	230/1/50-60	536	495	1705	177	30.8
CHA42 -70°C	47700881001	3.33	200	118	14	203	-70	1 1/2"	230/1/50-60	536	495	1905	180	35.9
CHA50 -70°C	47700882001	4.00	240	142	14	203	-70	1 1/2"	230/1/50-60	536	495	1905	188	35.9

CORRECTION FACTORS

INLET AIR TEMPERATURE	INLET AIR PRESSURE										
bar g	4	5	6	7	8	9	10	11	12	13	14
35°C	0.63	0.75	0.88	1.00	1.14	1.25	1.37	1.49	1.64	1.75	1.89
40°C	0.55	0.66	0.77	0.88	1.00	1.00	1.20	1.32	1.43	1.54	1.64
45°C	0.45	0.54	0.63	0.72	0.81	0.90	1.00	1.08	1.18	1.27	1.35
50°C	0.32	0.39	0.45	0.52	0.58	0.65	0.71	0.78	0.85	0.91	0.97

INLET AIR TEMPERATURE	INLET AIR PRESSURE										
psi g	58	73	87	102	116	131	145	160	174	189	203
95°F	0.63	0.75	0.88	1.00	1.14	1.25	1.37	1.49	1.64	1.75	1.89
104°F	0.55	0.66	0.77	0.88	1.00	1.00	1.20	1.32	1.43	1.54	1.64
113°F	0.45	0.54	0.63	0.72	0.81	0.90	1.00	1.08	1.18	1.27	1.35
122°F	0.32	0.39	0.45	0.52	0.58	0.65	0.71	0.78	0.85	0.91	0.97

Prefilters and Postfilter are supplied as standard on Modular Dryers.

Prefilter

Particle removal down to 0.01 micron

- Including water and oil aerosols
- Maximum remaining oil aerosol content of 0.01 mg/m³ @ 21°C

Postfilter

Particle removal down to 0.1 micron

- Including coalesced liquid, water and oil
- Maximum remaining oil aerosol content of 0.03 mg/m³ @ 21°C

At a glance...

Capacity
400 - 8500 m³/hr

Weight
285 - 4400 kg

Connection Size
1½ - 3"

TWIN TOWER HEATLESS DESICCANT DRYERS

Applications

- Air bearings
- Instrument Air
- Sand blasting
- Air gauging
- Spray painting
- Chemical Process - Oxydation, Ammonia Production
- Conveying, powder products
- Fluidics, sensors
- Food & beverages, direct air contact
- Micro-electronics manufacture
- Clean room processing air - blanketing
- Food & beverage - packaging, forming
- Photographic film processing

Premium in-house air treatment manufacturing

A modern production system and process demands increasing levels of air quality, and compressed air operators need to ensure that the downstream equipment also delivers on it 100%.

The new downstream portfolio manufactured by Champion utilising the latest technology provides an energy efficient solution at the lowest life cycle costs. The same quality, performance, and efficiency standards delivered by the compressors can now be enjoyed from the air treatment range.

Investment in our manufacturing site, in addition to the support teams, ensures that compressed air operators don't need to worry about the quality of their compressed air – quality that is key to ensuring maximum production efficiency and investment protection.

TYPE	PART NO	CONNECTION SIZE	CAPACITY		WEIGHT	DIMENSIONS		
		inch	m³/hr	m³/hr	kg	LENGTH	WIDTH	HEIGHT
CHT67F	47726991001	1½"	400	340	285	2160	825	530
CHT83F	47726992001	1½"	500	425	400	2380	796	550
CHT125F	47726993001	2"	750	637.5	520	2117	970	620
CHT150F	47726994001	2"	900	765	700	2305	970	620
CHT67FS	47727056001	1½"	400	340	285	2160	825	530
CHT83FS	47727057001	1½"	500	425	400	2380	796	550
CHT125FS	47727058001	2"	750	637.5	520	2117	970	620
CHT150FS	47727059001	2"	900	765	700	2305	970	620
CHT67F-70	47727069001	1½"	400	340	285	2160	825	530
CHT83F-70	47727070001	1½"	500	425	400	2380	796	550
CHT125F-70	47727071001	2"	750	637.5	520	2117	970	620
CHT150F-70	47727072001	2"	900	765	700	2305	970	620

CHT67F to CHT150F is standard at -40°C PDP, CHT67FS to CHT150FS is standard at -40°C PDP with Energy Management System, CHT67F-70 to CHT150F-70 is at -70°C PDP

Notes

At a glance...

Operating Pressure
1 - 16 bar

Flow Rate
1.1 - 75 m³/min

Operating Temp. Range
25°C -120°C

Pipe Size
1 - 2½"

AIR COOLED AFTERCOOLERS CHRA SERIES

Air cooled aftercoolers series CHRA have been designed to reduce compressed air temperature and water vapour dew point in compressed air system. A high efficiency axial fan forces ambient air over the heat exchangers copper tubes supported by aluminium fins, which provides the necessary cooling effect. The compressed air is cooled down to approximately 10°C above ambient temperature. CHRA aftercoolers ensures the maximum performance and protection of all equipment, such as refrigeration dryers, adsorption dryers and filters, positioned downstream of this unit.

TYPE	PART NO	FLOW RATE		AIR		FAN	OPERATING PRESSURE	DIMENSIONS [MM]		WEIGHT
		m³/min	m³/h	IN	OUT	W	bar	LENGTH	HEIGHT	kg
RA10	CC1246362	1	60	1"	1"	20	1 - 16	600	955	19
RA20	CC1246504	2	120	1"	1"	20	1 - 16	600	955	20
RA30	CC1246505	3	180	1 1/2"	1 1/2"	115	1 - 16	820	1145	29
RA40	CC1246506	4	240	1 1/2"	1 1/2"	135	1 - 16	1030	1145	32
RA65	CC1227381	6.5	390	2"	1 1/2"	690	1 - 16	970	1365	51
RA80	CC1246392	8	480	2"	1 1/2"	690	1 - 16	965	1405	53
RA120	CC1227462	12	720	2"	2"	760	1 - 16	1000	1555	97
RA160	CC1246393	16	960	2 1/2"	2 1/2"	760	1 - 16	1205	1765	120
RA200	CC1246514	20	1200	3"	2 1/2"	660	1 - 16	1410	2120	240
RA250	CC1218222	25	1500	3"	3"	660	1 - 16	1410	2120	250
RA300	CC1246515	30	1800	DN100	DN100	660	1 - 16	2095	2060	280
RA400	CC1246516	40	2400	DN100	DN100	2 x 760	1 - 16	2415	2050	300
RA500	CC1246517	50	3000	DN125	DN125	2 x 1300	1 - 12	3245	2000	310
RA650	CC1246518	65	3900	DN125	DN125	2 x 1300	1 - 12	3245	2000	390
RA750	47831947001	75	4500	DN150	DN150	2 x 1300	1 - 12	3325	2150	390

At a glance...

Operating Pressure
1 - 12 bar g

Flow Rate
2.2 - 759.5 m³/min

Operating Temp. Range
1.5°C - 200°C

WATER COOLED AFTERCOOLERS CHA SERIES

Applications

- Automotive
- Electronics
- Food & Beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial application

Water-cooled aftercoolers series CHA have been designed, to reduce compressed air temperature thus water vapour content in compressed air system. Hot compressed air/ gas passes through the tubes. Cooling water passes around the tubes in counter flow. CHA aftercooler ensures the maximum performance and protection of all equipment, such as refrigeration dryers, adsorption dryers and filters, positioned downstream of this unit.

TYPE	PART NO	AIR		OPERATING PRESSURE	FLOW RATE		DIMENSIONS [MM]	
		IN	OUT	bar	m³/min	cfm	A	B
A30	**CC1246520**	1 1/2"	1 1/2"	1 - 12	3	106	850	385
A60	**CC1246521**	2 1/2"	1 1/2"	1 - 12	6	212	1060	385
A80	**CC1246523**	2 1/2"	1 1/2"	1 - 12	8	282	1300	385
A140	**CC1246524**	DN100	DN100	1 - 12	14	494	1300	702
A250	**CC1240647**	DN100	DN100	1 - 12	25	882	1300	702
A400	**CC1246525**	DN150	DN125	1 - 12	40	1412	1300	702
A500	**CC1246526**	DN175	DN125	1 - 12	50	1765	1300	770
A800	**CC1246527**	DN250	DN150	1 - 12	80	2824	1300	845
A1100	**CC1246528**	DN250	DN150	1 - 12	110	3882	1300	845
A1500	**CC1246529**	DN300	DN200	1 - 12	150	5294	1300	925
A1800	**CC1246530**	DN350	DN200	1 - 12	180	6353	1300	925
A2100	**CC1246531**	DN400	DN200	1 - 12	210	7412	1500	925

At a glance...

Operating Pressure
1 - 16 bar

Operating Temp. Range
25°C -120°C

Pipe Size
1 - 2½"

Flow Rate
1.1 - 75 m³/min

ACTIVATED CARBON TOWER CH-FT SERIES

Applications

- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial application

The activated carbon tower eliminates oil vapour and hydrocarbon odours from your operations. Available in two configurations: – aluminum extrusion and fabricated tank are easy to maintain. In critical applications like food and pharmaceutical production where oil content ISO8573-1 Class 1 air or better is crucial, this carbon adsorption technology helps achieve the highest quality "technically oil-free air".

Extruded aluminum units are up to model CHFT58L and are lightweight (CHFT5L can be wall-mounted). As per the tank configuration, they can be used in compressed air systems or at the point of use. Rightsizing units with corrective factors ensures consistent outlet air quality over 12 months of continuous operations.

This activated carbon tower is a cost-effective, adaptable solution to your oil-free compressed air requirements from the experts at Champion. Deliver Class 0 Air when installed with upstream and downstream filters to intercept activated carbon dust.

- Virtually Oil Free Air: ISO8573-1 Class 0: 0.003 mg/m³ oil content when used with inline filters
- Can be used with Oil Free and Contact Cooled Compressors
- Easy to replace lose high quality Activated Carbon Molecular Sieve
- Long service interval - media replacement every 12 months

CH-FT Activated Carbon Tower

MODEL	CODE	GAS	BAR	M³/MIN	CFM	A	B	C	KG
CHFT5L	47745977001	1/2"	14	0.5	17.66	749	212	143	8
CHFT12L	47745978001	3/4"	14	1.25	44.14	890	267	255	20
CHFT18L	47745979001	1"	14	1.83	64.63	1090	267	255	24
CHFT25L	47745980001	1"	14	2.5	88.29	1440	267	255	32
CHFT30L	47745981001	1"	14	3	105.94	1640	267	255	35
CHFT58L	47745982001	1 1/2"	14	5.83	205.88	1660	447	255	70
CHFT100L	47745983001	2"	15	10	353.15	2113	391	N/A	115
CHFT166L	47745984001	2"	15	16.67	588.70	2148	436	N/A	245
CHFT260L	47745985001	3"	15	26	918.18	2463	483	N/A	222
CHFT383L	47745986001	3"	15	38.33	1353.61	2693	595	N/A	379
CHFT466L	47745987001	DN100	13	46.67	1648.14	2879	721	N/A	456
CHFT950L	47745988001	DN150	13	95	3354.90	3455	855	N/A	900

CH-FT Activated Carbon Tower Service Kits

MODEL	CODE
Kit CHFT5L Champion	47752199001
Kit CHFT12L Champion	47752200001
Kit CHFT18L Champion	47752201001
Kit CHFT25L Champion	47752202001
Kit CHFT30L Champion	47752203001
Kit CHFT58L Champion	47752204001
Kit CHFT100L Champion	47752205001
Kit CHFT166L Champion	47752206001
Kit CHFT260L Champion	47752207001
Kit CHFT383L Champion	47752208001
Kit CHFT466L Champion	47752209001
Kit CHFT950L Champion	47752210001

CORRECTION FACTORS												
°C/BARG	4	5	6	7	8	9	10	11	12	13	14	15
25°C	0.63	0.75	0.88	1.00	1.00	1.00	1.00	1.14	1.14	1.14	1.25	1.25
30°C	0.63	0.75	0.88	1.00	1.00	1.00	1.00	1.14	1.14	1.14	1.25	1.25
35°C	0.63	0.75	0.88	1.00	1.00	1.00	1.00	1.14	1.14	1.14	1.25	1.25
40°C	0.63	0.66	0.77	0.88	0.88	0.88	0.88	1	1	1	1.11	1.11
45°C	0.63	0.54	0.63	0.72	0.72	0.72	0.72	0.81	0.81	0.81	0.9	0.9
50°C	0.63	0.39	0.45	0.52	0.52	0.52	0.52	0.58	0.58	0.58	0.65	0.65

Notes

At a glance...

Operating Pressure
11 - 16 bar

Capacity
100 - 10000l

VERTICAL AIR RECEIVERS

Air receivers are an important part of the compressed air system, evening out peaks and troughs in air demand, minimising pulsations from piston compressors and protecting your air compressor from over frequent load/unload or start stop cycles.

VERTICAL TANKS[1)]	CODE	DIRECTIVE	SIZE litre	PRESSURE bar	AIR OUTLET inch
TANK 100L-11	CC1214969K	2014/29/EU	100	11	3/4
TANK 150L-11	CC1214973K	2014/29/EU	150	11	1
TANK 200L-11	CC1215044K	2014/29/EU	200	11	1
TANK 200L-11	CC1215045K	2014/29/EU	200	11	2
TANK 270L-11	220662K	2014/29/EU	270	11	1
TANK 270L-11	CC1215046K	2014/29/EU	270	11	2
TANK 500L-11	220663K	2014/29/EU	500	11	1
TANK 500L-11	CC1215047K	2014/29/EU	500	11	2
TANK 720L-11	CC1229498K	2014/29/EU	720	11	2
TANK 900L-11	CC1120428K	2014/29/EU	900	11	1.5
TANK 900L-11	CC1215049K	2014/29/EU	900	11	2
TANK 1000L-12	220664K	2014/68/UE (PED)	1000	12	2
TANK 1500L-12	CC1120429K	2014/68/UE (PED)	1500	12	2
TANK 2000L-12	220665CK	2014/68/UE (PED)	2000	12	2
TANK 2000L-12	CC1215050K	2014/68/UE (PED)	2000	12	3
TANK 3000L-12	220668CK	2014/68/UE (PED)	3000	12	2
TANK 3000L-12	CC1215051K	2014/68/UE (PED)	3000	12	3
TANK 100L-16	CC1215052K	2014/29/EU	100	16	3/4
TANK 150L-16	CC1215055K	2014/29/EU	150	16	1
TANK 270L-16	CC1215057K	2014/29/EU	270	16	1
TANK 500L-16	CC1215058K	2014/29/EU	500	16	1
TANK 1000L-16	CC1215059K	2014/68/UE (PED)	1000	16	2
TANK 1500L-16	CC1215060K	2014/68/UE (PED)	1500	16	2
TANK 2000L-16	CC1109207K	2014/68/UE (PED)	2000	16	2
TANK 3000L-16	CC1215061K	2014/68/UE (PED)	3000	16	2
TANK 5000L-8	CC1215062K	2014/68/UE (PED)	5000	8	3
TANK 8000L-8	CC1215063K	2014/68/UE (PED)	8000	8	3
TANK 10000L-8	CC1215064K	2014/68/UE (PED)	10000	8	3
TANK 5000L-12	CC1215065K	2014/68/UE (PED)	5000	12	3
TANK 8000L-12	CC1215066K	2014/68/UE (PED)	8000	12	3
TANK 10000L-12	CC1215067K	2014/68/UE (PED)	10000	12	3

[1)] Including paint, support legs, pressure gauge, safety valve and inlet and outlet nozzles.

At a glance...

Operating Pressure
0 - 80 bar

Environmental Protection
IP54, IP65

CONDENSATE DRAINS

Champion drains can be applied in both oil-lubricated and oil-free compressor applications. Champion products carry globally recognised approvals, and each product is 100% tested before dispatch.

Champion drains are robust and designed for long life industrial applications.

The Champion direct-acting valve construction with a large orifice has proven to be the most reliable option for condensate draining applications, avoiding potential blockages. In addition, we apply stainless steel moving parts that offer an extended life guarantee and are less sensitive to aggressive particles found in the condensate.

Champion valves are constructed from robust brass or stainless steel, ensuring no damage occurs during transportation, installation, functional operation and subsequent maintenance throughout the drain's working life.

Drains are also installed outdoors. IP65 (NEMA4) insulation protection is, therefore, a minimum requirement. High-grade coil insulation protects the copper wire from overheating, and top brand PCB components are applied to our electronic modules.

Servicing Champion drains is quick and easy. Their service-friendly design ensures short maintenance intervals.

Based on their high and low-temperature operation characteristics, FPM seals have been specifically selected and used in all Champion CHTDC, CHTDV and CHCNL drains. In addition, FPM seals are chosen as this material has proven to be the best choice for compressed air condensate draining applications.

CHTDV & CHTDC Electronic Timer-Controller Condensate Drains

TECHNICAL DATA	CHTDV 230V 1/4"	CHTDV 115V 1/4"	CHTDV 230V 1/2"	CHTDV 115V 1/2"	CHTDV 230V 3/8"	CHTDV 115V 3/8"	CHTDC 230V 16bar 1/2"	CHTDC 115V 16bar 1/2"
SUPPLY VOLTAGE	230V	115V	230V	115V	230V	115Vå	230V	115V
OPERATING TEMP. RANGE	1 - 55°C (34 - 131°F)							
OPERATING PRESSURE	0 - 16 bar (0 - 232 psi)							
PROTECTION CLASS	IP65 (NEMA4)							
COIL POWER	10 W	13 W	10 W	13 W	10 W	13 W	10 W	13 W
MASS			0.4 kg				0.6 kg	
TIME ON	0.5 - 10 s							
TIME OFF	0.5 - 45 m							
INLET CONNECTION	1/4"		1/2"		3/8"		1/4" & 1/2"	
OUTLET CONNECTION	1/4"		1/2"		3/8"		1/2"	
FLOW RATE KVS	7 m^3/h							
DIMENSIONS LXBXH[MM]	50x89x114 mm						94x89x127 mm	
MEDIUM	Condensate (air, water & oil)							
INTEGRAL STRAINER	No						Yes	
INTEGRAL BALL VALVE	No						Yes	
PART NUMBER	47803936001	47803935001	47774991001	47774993001	47774990001	47774992001	47775260001	47775262001

CHCNL 10 & 100 Electronic Zero Air Loss Drain with Alarm

TECHNICAL DATA	CHCNL10 230V	CHCNL10 115V	CHCNL10 230V ALARM	CHCNL10 115V ALARM	CHCNL100 230V	CHCNL100 115V
SUPPLY VOLTAGE	230V	115V	230V	115V	230V	115V
FREQUENCY	50-60 Hz					
OPERATING PRESSURE	16bar (232psi)					
DRAIN CAPACITY (@16BAR/232 PSI)	45 l/h				665 l/h	
OPERATING TEMP. RANGE	1 - 50 °C (34 - 122 °F)					
INLET CONNECTION	1/2"					
OUTLET CONNECTION	1/4"					
ALARM FUNCTION	No		Yes N/O			
INLET STRAINER	Yes					
PROTECTION CLASS	IP65 (NEMA4)					
MASS	0.5 kg				1.5 kg	
DIMENSIONS (LXBXH)	123x74x92 mm				179x114x87 mm	
PART NUMBER	47775257001	47775258001	47775263001	47775264001	47775259001	47775261001

IED Series
Electronic
Condensate Drains

TECHNICAL DATA	IED	
VOLTAGE	230 VAC	115 VAC
FREQUENCY	50-60 Hz	50-60 Hz
INTERNAL FUSE	5 x 20 1A T	
POWER	10 VA	
OPERATING PRESSURE RANGE	0-16 bar [0-232 psi]	
DRAIN CAPACITY [AT 7 bar/101 PSI]	8 l/h at 7 bar [0,005 cfm at 101 psi]	
OPERATING TEMPERATURE RANGE	1.5-65 °C [35-149°F]	
INLET CONNECTION	G 1/2" parallel thread	
PROTECTION CLASS	IP54	
MASS [kg]	0.3	
OPERATING TEMPERATURE RANGE	1.5 to 65°C	
DIMENSIONS [L x B x H]	61 x 60 x 161 mm	
SERVICE NETWORK CONNECTION	-	-
ALARM OUTPUT	-	-
PART NUMBER	CC1182025	

EMD Series
Electronic
Condensate Drains

TECHNICAL DATA	EMD12 230 V
SERVICE NETWORK CONNECTION	-
ALARM OUTPUT	-
VOLTAGE	230 VAC, 50-60 Hz
INTERNAL FUSE	5 x 20 1A T
POWER	10 VA
OPERATING PRESS. RANGE	0-16 bar [0-232 psi]
DRAIN CAPACITY [AT 7 bar/101 PSI]	12 l/h [0.007cfm]
OPERATING TEMP. RANGE	1.5-65°C [35-149°F]
INLET CONNECTION	G 1/2"
OUTLET CONNECTION	Push connection for tube ø8
PROTECTION CLASS	IP54
MASS [kg]	0.55
DIMENSIONS A x B x C [mm]	133 x 76 x 147
PART NUMBER	CC1112242

SAC 120
Automated
Condensate Drains

TECHNICAL DATA	
OPERATING TEMP. RANGE	1.5 - 65 °C [35-149 °F]
OPERATING PRESSURE	20 bar [290 psi]
MASS	0.6 kg
DISCHARGE CAPACITY [AT 7 bar/101 PSI]	167 l/h
INLET CONNECTION	G 1/2" (NPT option)
OUTLET CONNECTION	G 1/2" (NPT option)
DIMENSIONS A x B x C	135 x 110 x 130 mm
MEDIUM	Condensate (air, water, oil)
PART NUMBER	222394

Recommendations

Install ball valve between pressure vessel and inlet connection. Install strainer element between pressure vessel and inlet connection. Install nipple with venting tube to avoid generation of air bubbles. Nipple is screwed on inlet connection.

SAC 70
Automated Condensate Drain

TECHNICAL DATA	
OPERATING TEMP. RANGE	1.5 - 65°C [35-149°F]
OPERATING PRESSURE	0 - 16 bar [0 - 232 psi]
MASS	0.04 kg
CONNECTION	G ½"
OUTLET CONNECTION	ø8
DIMENSIONS H x D	90 x ø38.5 mm
MEDIUM	Condensate (air, water, oil)
PART NUMBER	223120

MCD
Manual Condensate Drain

TECHNICAL DATA		
OPERATING TEMP. RANGE		1.5 - 65 °C [35-149 °F]
OPERATING PRESSURE		0-20 bar [290 psi]
MASS		0.06 kg
CONNECTION		G ½"
DIMENSIONS	H	38.2 mm
	E	24.0 mm
MEDIUM		Condensate [air, water, oil]
MATERIAL		Brass
PART NUMBER		CC1183830

OIL/WATER SEPARATORS CHSEP

Unrivalled performance and efficiency

Environmental regulations strictly prohibit the discharge of oily wastes and chemicals, including the condensate drained from a compressed air system. This mixture of oil and water is classified as hazardous industrial waste, and the discharge of untreated compressor condensate into foul sewers is prohibited. Compressor condensate must be either collected or treated before disposal using an oil water separator. Oil water separators remove lubricants from compressed air condensate ensuring environmentally friendly disposal. Considering that compressor condensate consists of approximately 95% water, it makes financial sense to separate the oil from the condensate before disposing of waste. Untreated condensate disposal is costly as it is charged by volume. Every end-user that operates a compressed air system should have a condensate waste management program in place, not only to abide by laws and regulations but also to practice environmental and ecological responsibility. Champion oil water separators are a reliable, efficient, cost-effective, and environmentally friendly solution for on-site discharge of condensate from air compressors.

Modular design for enhanced performance

Modern industrial working environments present a host of challenges for effective and long-lasting oil water separation including ambient humidity and extreme temperatures, different coolant types, excessive operating hours, equipment age, compressor loading and residual oil.
To meet these challenges, Champion separators offer different sizes to match the customers needs. They feature adsorption media that withdraws and permanently adsorbs the lubricants.

Features are your benefits

Pre-filter removes contaminants
No fouling and clogging

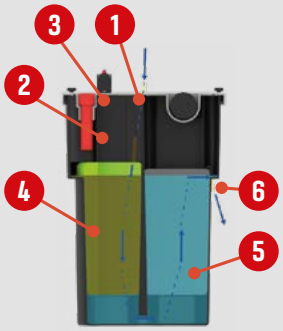
Meets compressor flow requirements
Up to 60 m^3/min

Complies with environmental regulations
Minimised fluid disposal costs

Streamlined design
Reliable operation with reduced maintenance

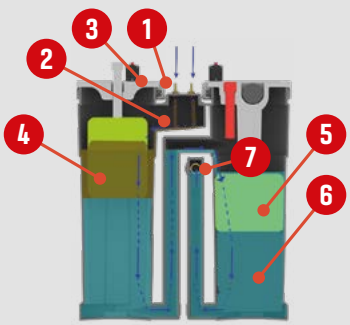
Oil-water separator | Principle of operation

Puro Flow - 2 to 4.5 m^3/min



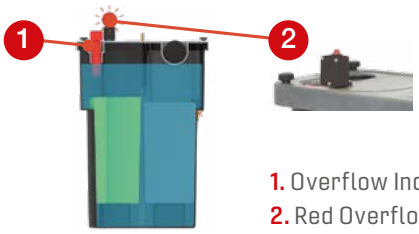
1. Inlet connection to the depressurising chamber
2. Demister filter to separate compressed air from the condensate
3. Compressed air discharge
4. Initial filtration element (polypropylene) to capture most of the oil and condensation
5. Activated carbon element to capture oil residuals and hydrocarbons
6. Water discharge

Sepremium Flow - 10 to 60 m^3/min

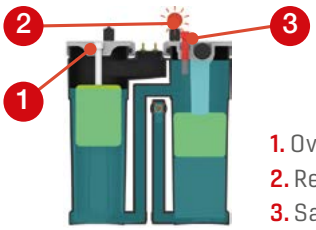


1. Inlet connection to the depressurising chamber
2. Demister filter to separate compressed air from the condensate
3. Compressed air discharge
4. Initial filtration element (polypropylene) to capture most of the oil and condensation
5. 2nd polypropylene element to protect the activated carbon element and avoid oil-layer creations, which may cause overflow
6. Activated carbon element to capture oil residuals and hydrocarbons
7. Water discharge

Oil-water separator - Indicators



1. Overflow Indicator
2. Red Overflow Light*



1. Overflow Indicator
2. Red Saturation - Overflow Light*
3. Saturation Indicator

***Sealed with batteries. No risk of contact with any liquid.**

The responsible choice

By minimising the cost associated with the disposal of fluids, and keeping them out of the environment, Champion oil water separators help you to stay compliant with environmental regulations and avoid costly fines. The separator is also designed to operate with minimal maintenance or downtime, resulting in no mess or overflow.
Champion separators provide condensate discharge levels < 5 ppm at standard conditions.

Guaranteed adsorption of a variety of coolants

Polypropylene and carbon media are effective on a big variety of polyalphaolefins lubricants and mineral oils available in the market. Compatible also with polyglycol coolants, with a dedicated model and code (not displayed in the list below).

Multiple sizing options

Champion oil water separators come in 6 sizes, from 2 to 60 m^3/min. The media is designed to last up to 6 months at 8,000 hours/year of operation and up to 12 months at 4,000 hours/year. Each model has standardised, modular media bags.

TECHNICAL DATA	
OPERATING TEMP.RANGE	1 - 50°C
OPERATING MEDIA	Condensate (water - oil; Non aggressive) Suitable for mineral lubricants, synthetic lubricants and stable emulsions. For polyglycol coolants, contact us for a dedicated code and quotation.
DESIGN CONDITIONS	4 ppm Oil Carryover from compressor, 75% compressor loading, 20°C ambient and 70% RH
RESIDUAL OIL CONTENT	<5 ppm
SERVICE INTERVALS	When first of the following parameters appears: > 3 - 6 months if 8000 operating hours of compressor > 6 - 12 months if 4000 operating hours of compressor > when prefilter has oil built up > according to lifetime indicator / overflow indicator

MODEL	CONNECTIONS INLET BSP	CONNECTIONS OUTLET BSP	FAD M^3/MIN	LENGTH MM	HEIGHT MM	DEPTH MM	WEIGHT KG	MATERIAL NO.
CHSEP020	1/2"	1/2"	2	270	249	240	4.1	47810927001
CHSEP020 WB	1/2"	1/2"	2	270	249	240	4.1	47811383001
CHSEP045	1/2"	1/2"	5	392	569	191	8	47882806001
CHSEP100	1/2"	1"	10	670	750	260	17	47882808001
CHSEP200	1/2"	1"	20	800	900	320	28	47882810001
CHSEP300	1/2"	1"	30	990	900	400	42	47882812001
CHSEP600	1/2"	1"	60	1,160	1,040	490	74	47887502001

Polyglycol version also available. Contact us for more info.

SERVICE & **SPARE PARTS**

- Standard & Extended Warranty
- Service schedule
- Spare part kits


CHAMPION
FM7RS
CHAMPION
CHAMPION
FM30RS
CHAMPION
FM6

WARRANTY DURATION AND OPTIONS

• Warranty overview by model - range

MODEL - RANGE	WARRANTY DURATION	EXTENDED WARRANTY AVAILABLE
FM 2-6 Series Screw Compressors	24 Months[1]	✗
FM07 - FM132 Series Screw Compressors	24 Months[1]	✓
Hydrovane	12 Months[1]	✓[2]
Champion Dryers (CHA, CHT, CHR)	24 Months[1]	✓[2]
Champion Portable Compressors	12 Months[1]	✗
Champion Filters, Water Separators & Accessories	12 Months[1]	✗
Replacement Spare Parts	12 Months	✗

[1] - The complete machine will have a warranty period of as mentioned above from date of commissioning or an additional 6 months from date of despatch ex Champion which ever is the soonest.
Champion recommends that only genuine Champion or approved parts be used, and that service be carried out by an authorised Champion trained service engineer.

[2] Available on condition that dryers are equipped with Champion pre/post filtration and installed along with a screw compressor with 5-Year Extended Warranty.

• Replacement spare parts

The warranty period for replacement parts excluding air ends, motors and consumable spare parts shall be 12 months ex Champion The extent of this will be replacement part only.

Champion will not warrant adjacent components to the replacement part.

Any defective spare part found prior to installation should be processed directly with the Champion parts department, not as a warranty claim.

• Extended warranty

Champion offer an Extended Warranty programme on selected models.

Please refer to the terms and conditions of the Extended Warranty Programmes.

For more information please see document: "Standard Warranty / Extended Warranty Terms & Conditions" available on Repsnet.

FM2 - FM6 SERVICE SCHEDULE

			DAILY[2]	EVERY 500 HOURS [1]	EVERY 2000 HOURS OR 12 MONTHS[1]	EVERY 4000 HOURS OR 12 MONTHS[1]	EVERY 8000 HOURS OR 24 MONTHS[1]	EVERY 12000 HOURS OR 48 MONTHS[1]	EVERY 16000 HOURS OR 48 MONTHS[1]
SERVICE A	C-Pro Controller	Check fault indicator lights and alarms	•	•	•	•	•	•	•
	Condensate Drain and Strainer	Check autom. condensate discharger	•	•	•	•	•	•	•
	Air Tank	Discharge oil separator condensate	•	•	•	•	•	•	•
	Oil System	Check oil level	•	•	•	•	•	•	•
SERVICE C	Oil System	Check oil leaks			•	•	•	•	•
	General	Clean inside compressor			•	•	•	•	•
	Air Filter	Clean air filter			•	•	•	•	•
	Drive Belts	Check belt tension			•	•	•	•	•
	Electrical Wiring	Check connections and condition			•	•	•	•	•
	Relief Valve	Check operation of pressure relief valve			•	•	•	•	•
	Aftercooler/Oil Cooler	Clean cooler externally			•	•	•	•	•
	Oil System	Clean oil return line			•	•	•	•	•
	Oil Filter	Renew oil filter element			•	•	•	•	•
	Air Filter	Renew air filter element			•	•	•	•	•
D	Separator Filter	Replace oil separator cartridges				•	•	•	•
	Oil System	Renew oil (ChampLUBE)				•	•	•	•
SERVICE E	Valves	Refurbish Manifold					•		•
	Valves	Replace MPV element					•		•
	Probes	Replace temperature probe					•		•
	Valves	Replace inlet Valve					•		•
ADDITIONAL	Drive Belts	Replace the belts and check drive pulleys, replace if worn out						•	
	Probes	Replace Pressure Sensor							•
	Air End	Replace shaft seal kit							•
	Oil Hoses	Replace oil hoses							•
	Drive Motor	Check and retighten main motor cables							•
	Air End	Replace Air End	Predictive - only when required						

[1] Whichever occurs soonest

[2] Normally undertaken by end user through visual check

Inspection of the pressure vessel in accordance with local guidelines

Where the compressor is part of an integrated unit, please refer to the separate dryer manual for any dryer related service tasks. Receiver certification beyond the initial period is the customers responsibility.

Please refer to the Operators handbook if there are specific local service requirements relevant to the territory you are in e.g. Oil and Filter change intervals which may be different to those shown above.

Service intervals will be shorter depending on the ambient operating conditions (heat, humidity, dirt etc.), effecting Lubricants, filters, separators etc.

FM7 - FM22+ SERVICE SCHEDULE

			DAILY[2]	WEEKLY[2]	EVERY 2000 HOURS OR 12 MONTHS[1]	EVERY 4000 HOURS OR 12 MONTHS[1]	EVERY 8000 HOURS OR 24 MONTHS[1]	EVERY 20000 HOURS OR 60 MONTHS[1]	EVERY 24000 HOURS OR 72 MONTHS[1]
SERVICE A	Controller	Note and record sump pressure	•	•	•	•	•	•	•
	Controller	Note and record discharge pressure	•	•	•	•	•	•	•
	Controller	Note and record discharge temperature	•	•	•	•	•	•	•
	Enclosure Filters	Check condition, clean if required	•	•	•	•	•	•	•
	Scavenge oil system	Check operation	•	•	•	•	•	•	•
SERVICE B	Controller	Check fault history		•	•	•	•	•	•
	Controller	Check for any service requirements		•	•	•	•	•	•
	Oil System	Check oil level and top up if required		•	•	•	•	•	•
	Aftercooler/Oil Cooler	Check condition, clean if required		•	•	•	•	•	•
SERVICE C	Oil Filter	Renew oil filter element			•	•	•	•	•
	Air Filter	Renew air filter element			•	•	•	•	•
	Oil System	Renew oil (ChampLUBE)			•	•	•	•	•
	Dryer Cooling Air Inlet Filter[3]	Renew cooling air inlet filter			•	•	•	•	•
	Control System	Check operation			•	•	•	•	•
	Blowdown System	Check operation			•	•	•	•	•
	Electrical Wiring	Check connections and condition			•	•	•	•	•
	Controller	Check connections and plugs			•	•	•	•	•
	Separator Filter	Renew separator filter				•	•	•	•
	Oil Scavenge System	Clean and check operation				•	•	•	•
	Relief Valve	Functionally test				•	•	•	•
	Drive Belts[3]	Check condition of belts and renew if required				•	•	•	•
SERVICE D	Minimum Pressure Valve	Renew minimum pressure valve						•	•
	Intake Valve	Overhaul intake valve					•	•	•
	Emergency Stop Button	Test emergency stop button					•	•	•
	VSD Drive/Starter	Check condition of contacts and renew if required					•	•	•
ADDITIONAL	Air End	Renew air end shaft seal							•
	Shaft Seal Oil Return Tube	Renew shaft seal oil return tube							•
	Oil Hoses	Check condition and renew if required						•	•
	Control Solenoids	Renew control solenoids						•	•
	Drive Belts	Renew drive belts						•	•
	Drive Motor Bearings	Renew drive motor bearings							•
	Drive Motor AVM's	Check drive motor Anti Vibration Mounts							•
	Air End Discharge Temperature Sensor	Renew temperature sensor							•
	Oil Bypass Element	Renew oil bypass element							•
	Air End AVM's	Check air end Anti Vibration Mounts							•
	Air End	Renew Air End	Predictive - only when required						

[1] Whichever occurs soonest

[2] Normally undertaken by end user through visual check

[3] If applicable

Inspection of the pressure vessel in accordance with local guidelines

Where the compressor is part of an integrated unit, please refer to the separate dryer manual for any dryer related service tasks. Receiver certification beyond the initial period is the customers responsibility.

Please refer to the Operators handbook if there are specific local service requirements relevant to the territory you are in e.g. Oil and Filter change intervals which may be different to those shown above.

Service intervals will be shorter depending on the ambient operating conditions (heat, humidity, dirt etc.), effecting Lubricants, filters, separators etc.

FM30 - 132 SERVICE SCHEDULE

			DAILY[2]	WEEKLY[2]	EVERY 4000 HOURS OR 12 MONTHS[1]	EVERY 8000 HOURS OR 24 MONTHS[1]	EVERY 20000 HOURS OR 60 MONTHS[1]	EVERY 24000 HOURS OR 72 MONTHS[1]
SERVICE A	Controller	Note and record sump pressure	•	•	•	•	•	•
	Controller	Note and record discharge pressure	•	•	•	•	•	•
	Controller	Note and record discharge temperature	•	•	•	•	•	•
	Enclosure Filters	Check condition, clean if required	•	•	•	•	•	•
	Scavenge oil system	Check operation	•	•	•	•	•	•
SERVICE B	Controller	Check fault history		•	•	•	•	•
	Controller	Check for any service requirements		•	•	•	•	•
	Oil System	Check oil level and top up if required		•	•	•	•	•
	Aftercooler/Oil Cooler	Check condition, clean if required		•	•	•	•	•
SERVICE C	Oil Filter	Renew oil filter element			•	•	•	•
	Air Filter	Renew air filter element			•	•	•	•
	Oil System	Renew oil (Mineral or Foodgrade)			•	•	•	•
	Oil System[5]	Renew oil (Synthetic) AEON9000				•	•	•
	Dryer Cooling Air Inlet Filter[3]	Renew cooling air inlet filter			•	•	•	•
	Control System	Check operation			•	•	•	•
	Blowdown System	Check operation			•	•	•	•
	Electrical Wiring	Check connections and condition			•	•	•	•
	Controller	Check connections and plugs			•	•	•	•
	Inlet Water Strainer[4]	Check condition, clean if required			•	•	•	•
	Separator Filter	Renew separator filter			•	•	•	•
	Pipe work	Replace Victaulic Couplings			•	•	•	•
	Oil Scavenge System	Clean and check operation			•	•	•	•
	Relief Valve	Functionally test			•	•	•	•
SERVICE D	Oil Scavenge System	Renew oil scavenge tubing				•		•
	Minimum Pressure Valve	Renew minimum pressure valve				•		•
	Intake Valve	Overhaul intake valve				•		•
	Emergency Stop Button	Test emergency stop button				•		•
	Motor Drive Coupling Insert	Check condition and renew if required				•		•
	VSD Drive/Starter	Check condition of contacts and renew if required				•		•
ADDITIONAL	Air End	Renew air end shaft seal						•
	Shaft Seal Oil Return Tube	Renew shaft seal oil return tube						•
	Oil Hoses	Check condition and renew if required					•	•
	Control Solenoids	Renew control solenoids					•	•
	Drive Belts[3]	Renew drive belts					•	•
	Drive Motor Bearings	Renew drive motor bearings						•
	Drive Motor AVM's	Check drive motor Anti Vibration Mounts						•
	Air End Discharge Temperature Sensor	Renew temperature sensor						•
	Oil Bypass Element	Renew oil bypass element						•
	Air End AVM's	Check air end Anti Vibration Mounts						•
	Air End	Renew Air End	Predictive - only when required					

[1] Whichever occurs soonest

[2] Normally undertaken by end user through visual check

[3] If applicable

Inspection of the pressure vessel in accordance with local guidelines

Where the compressor is part of an integrated unit, please refer to the separate dryer manual for any dryer related service tasks. Receiver certification beyond the initial period is the customers responsibility.

Please refer to the Operators handbook if there are specific local service requirements relevant to the territory you are in e.g. Oil and Filter change intervals which may be different to those shown above.

Service intervals could be shorter depending on the ambient operating conditions (heat, humidity, dirt etc.), effecting Lubricants, filters, separators etc.

COMPRESSOR SERVICE KITS

SERVICE KITS OIL LUBRICATED SCREW COMPRESSORS

		EVERY 2000 HOURS OR 12 MONTHS[1]	EVERY 4000 HOURS OR 12 MONTHS[1]	EVERY 8000 HOURS OR 24 MONTHS[1]	EVERY 16000 HOURS OR 48 MONTHS[1]	OVERHAUL KIT EVERY 5 YEARS OR 20.000 HOURS	
FM2-FM6	Fixed Speed	CC1219905	CC1219906	CC1219907	CC1219908 + CC1219907		
FM7-11	Fixed Speed	CC1221491	CC1180671	CC1180677		CC1180682	+ 4K Kit
FM7RS-11RS	Regulated Speed	CC1221491	CC1180672	CC1180678		CC1180682	+ 4K Kit
FM15-22+	Fixed Speed	CC1221492	CC1180685	CC1180689		CC1180695	+ 4K Kit
FM15RS-22+RS	Regulated Speed	CC1221492	CC1180686	CC1180690		CC1180695	+ 4K Kit
FM30	Fixed Speed		CC1198084	CC1198090		CC1198096	+ 4K Kit
FM30RS	Regulated Speed		CC1198086	CC1198092		CC1198098	+ 4K Kit
FM37-45	Fixed Speed		CC1180685	CC1198091		CC1198097**	+ 4K Kit
FM37RS-45RS	Regulated Speed		CC1198087	CC1198093		CC1198099**	+ 4K Kit
FM55-75	Fixed Speed		CC1198088	CC1198094		CC1198100	+ 4K Kit
FM55RS-75RS	Regulated Speed		CC1198089	CC1198095		CC1198102	+ 4K Kit
FM90-132	Fixed Speed		SKFM90132-1	MKFM90132			
FM90RS-132RS	Regulated Speed		SKFM90132-1-RS	MKFM90132			

Only the following lubricants are allowed to be used to comply with Champion 5 Years Extended Warranty:

- Mineral lubricant ChampLUBE **CC1180019** (4 x 4 L) - **CC1180020** (20L)

** For 10 bar version; for other versions see in Repsnet

PORTABLES CMP SERIES SERVICE SCHEDULE

		EACH START UP	FIRST 20 HOURS OF OPERATION	EVERY 100 HOURS OR 6 MONTHS[1]	EVERY 300 HOURS OR 12 MONTHS[1]	EVERY 24 MONTHS[1]
Compressor	Check safety valve	•	•	•	•	•
Compressor	Check retaining bolts & nuts (adjust if necessary)		•	•	•	•
Compressor	Check & clean oil filter		•	•	•	•
Compressor	Check & clean air filter			•	•	•
Compressor	Clean oil cooler			•	•	•
Compressor	Check the 2 belts tension (adjust if necessary)			•	•	•
Compressor	Drain & replace compressor oil		•	•	•	•
Compressor	Replace separator cartridge				•	•
Compressor	Replace air filter				•	•
Compressor	Replace belts					•
Engine	Drain & replace engine oil		•	•	•	•
Engine	Replace engine oil filter			•	•	•
Engine	Replace engine oil filler gasket				•	•
Engine	Replace engine air filter				•	•
Engine	Replace engine fuel filter				•	•
Engine	Replace engine spark plugs				•	•

[1] Maintenance time intervals are based on operating hours or calendar date, whichever occurs first.

Recommended oils -

The engine oil (2 liter) is included in the service kits. Champion only recommends this oil.

The compressor oil that is recommended is SCUO2000-5GT. Please ask your distributor for further information.

Fuel:- Use automotive gasoline (unleaded)

SERVICE KITS PORTABLE SCREW COMPRESSORS

	AIR END KIT EVERY 300 HOURS OR 12 MONTHS[1]	ENGINE KIT EVERY 300 HOURS OR 12 MONTHS[1]
CMP-P10, CMP-P12, CMP-P14	CC1186378	CC1186379

Only the following lubricants are allowed to be used:
Mineral lubricant SCUO2000-5GT

[1] Maintenance time intervals are based on operating hours or calendar date, whichever occurs first.

Champion will not accept any responsibility for changes made to service kit numbers, prior to updating this document.

For belts and all other repair spare parts please consult the relevant parts lists

CHAMPION CHR6 - CHR417 REFRIGERATION DRYER SERVICE SCHEDULE

		DAILY	WEEKLY	MONTHLY	EVERY 12 MONTHS OR 2000 HOURS	EVERY 24 MONTHS OR 4000 HOURS
Dryer	Verify the temperature on the control panel display is acceptable	•	•	•	•	•
Condensate Drain	Visually check if the condensate is drained regularly	•	•	•	•	•
Dryer	Clean the filter mesh of the condensate drain system		•	•	•	•
Dryer	Clean condenser fins.			•	•	•
Dryer	Check electrical absorption			•	•	•
Filter	Check the conditions of the filters installed, replace elements as needed			•	•	•
Dryer	Check if flexible tube used for condensate drainage is damaged and replace if necessary				•	•
Dryer	Check if all connecting pipes are properly thightened and fixed				•	•
Filter	Depressurise the dryer. Replace pre- and post-filter elements.				•	•
Dryer	Replace the fan pressure switch					•

ADSORPTION AIR DRYERS CHA1-CHA50 (DS) SERVICE SCHEDULE

	DAILY	EVERY 12 MONTHS	EVERY 36 MONTHS
Check and record inlet pressure, temperature and flow.	•	•	•
Check tower pressure gauge readings are within operating tolarance CHA9-CHA50 only	•	•	•
Check dryer operation for proper cycling, depressurization and re-pressurization.	•	•	•
Check that the prefilter drain is operating properly and that there is no condensate discharged from purge mufflers	•	•	•
Verify that pressure in purging tower is 3psig (0.2barg) or less. If higher, muffler replacement is recommended.	•	•	•
Check the dryer digital controller for alarms (9-50 only)	•	•	•
Verify that prefilter and afterfilter differential pressure is within operating limits. Replace elements and/or cartridges as required.	•	•	•
Check desiccant and replace if necessary.		•	•
Inspect and clean pilot air control solenoid valves, check valves and flow valves. Rebuild and / or replace as required.		•	•
Replace drains on prefilter and afterfilter.		•	•
Test electrical components, replace as necessary.		•	•
Check and replace mufflers		•	•
Check for loose electrical wiring connections and tighten as required.		•	•
Inspect pneumatic valves and replace angle valve bonnets if not functioning properly (Preventive).			•
Check and replace shuttle valve assembly			•
Replace control air solenoid valve (Preventive).			•
Replace desiccant.			•

KITS FOR CHA1 - CHA50

MODEL	YEARLY KIT	EVERY 3 YEARS	DESSICANT AA EVERY 3 YEARS		DESSICANT MS EVERY 3 YEARS	
CHA1 -40°C	**47712097001**	**47712097001**	**47713689001**	1.4 kg		
CHA3 -40°C	**47712097001**	**47712097001**	**47713689001**	4.3 kg		
CHA4 -40°C	**47712101001**	**47712097001**	**47713689001**	6 kg		
CHA7 -40°C	**47711969001**	**47712102001**	**47713689001**	12.8 kg		
CHA9 -40°C	**47712106001**	**47712102001**	**47713689001**	16.7 kg		
CHA12 -40°C	**47712106001**	**47712102001**	**47713689001**	21.8kg		
CHA17 -40°C	**47712116001**	**47712117001**	**47713689001**	30.8 kg		
CHA25 -40°C	**47712116001**	**47712117001**	**47713689001**	35.9 kg		
CHA33 -40°C	**47712126001**	**47712127001**	**47713689001**	61.6 kg		
CHA42 -40°C	**47712131001**	**47712127001**	**47713689001**	71.8 kg		
CHA50 -40°C	**47712131001**	**47712127001**	**47713689001**	71.8 kg		
CHA7 -70°C	**47711969001**	**47712102001**	**47713689001**	8.6 kg	**47713690001**	4.3 kg
CHA9 -70°C	**47712106001**	**47712102001**	**47713689001**	11.1 kg	**47713690001**	5.6 kg
CHA12 -70°C	**47712106001**	**47712102001**	**47713689001**	14.5 kg	**47713690001**	7.3 kg
CHA17 -70°C	**47712116001**	**47712117001**	**47713689001**	20.5 kg	**47713690001**	10.3 kg
CHA25 -70°C	**47712116001**	**47712117001**	**47713689001**	23.9 kg	**47713690001**	12 kg
CHA33 -70°C	**47712126001**	**47712127001**	**47713689001**	41 kg	**47713690001**	20.5 kg
CHA42 -70°C	**47712131001**	**47712127001**	**47713689001**	47.9 kg	**47713690001**	23.9 kg
CHA50 -70°C	**47712131001**	**47712127001**	**47713689001**	47.9 kg	**47713690001**	23.9 kg

CH-FT ACTIVATED CARBON TOWER SERVICE KITS

MODEL	CODE
Kit CHFT5L Champion	47752199001
Kit CHFT12L Champion	47752200001
Kit CHFT18L Champion	47752201001
Kit CHFT25L Champion	47752202001
Kit CHFT30L Champion	47752203001
Kit CHFT58L Champion	47752204001
Kit CHFT100L Champion	47752205001
Kit CHFT166L Champion	47752206001
Kit CHFT260L Champion	47752207001
Kit CHFT383L Champion	47752208001
Kit CHFT466L Champion	47752209001
Kit CHFT950L Champion	47752210001

OWS OIL WATER SEPARATOR SERVICE KITS

MODEL	MATERIAL NUMBER
Service Pack CHSEP020	47822488001
Service Pack CHSEP045	47882838001
Service Pack CHSEP100	47882840001
Service Pack CHSEP200	47882842001
Service Pack CHSEP300	47882844001
Service Pack CHSEP600	47887504001

FILTER GUIDE

FILTER TYPE	M³/MIN	SIZE	FILTER ID NO	FILTER ELEMENT	ELEMENT NO
CHF005LM	0.5	3/8"	47698906001	CHE005LM	47699428001
CHF005LS	0.5	3/8"	47698923001	CHE005LS	47699429001
CHF005LR	0.5	3/8"	47698940001	CHE005LR	47699430001
CHF005LA	0.5	3/8"	47698957001	CHE005LA	47699431001
CHF007LM	0.7	1/2"	47698907001	CHE007LM	47699432001
CHF007LS	0.7	1/2"	47698924001	CHE007LS	47699433001
CHF007LR	0.7	1/2"	47698941001	CHE007LR	47699434001
CHF007LA	0.7	1/2"	47698958001	CHE007LA	47699435001
CHF0013LM	1.3	3/4"	47698908001	CHE0013LM	47699436001
CHF0013LS	1.3	3/4"	47698925001	CHE0013LS	47699437001
CHF0013LR	1.3	3/4"	47698942001	CHE0013LR	47699438001
CHF0013LA	1.3	3/4"	47698959001	CHE0013LA	47699439001
CHF0018LM	1.8	3/4"	47698909001	CHE0018LM	47699440001
CHF0018LS	1.8	3/4"	47698926001	CHE0018LS	47699441001
CHF0018LR	1.8	3/4"	47698943001	CHE0018LR	47699442001
CHF0018LA	1.8	3/4"	47698960001	CHE0018LA	47699443001
CHF0025LM	2.5	1"	47698910001	CHE0025LM	47699444001
CHF0025LS	2.5	1"	47698927001	CHE0025LS	47699445001
CHF0025LR	2.5	1"	47698944001	CHE0025LR	47699446001
CHF0025LA	2.5	1"	47698961001	CHE0025LA	47699447001
CHF0032LM	3.2	1"	47698911001	CHE0032LM	47699448001
CHF0032LS	3.2	1"	47698928001	CHE0032LS	47699449001
CHF0032LR	3.2	1"	47698945001	CHE0032LR	47699450001
CHF0032LA	3.2	1"	47698962001	CHE0032LA	47699451001
CHF0038LM	3.8	1"	47698912001	CHE0038LM	47699452001
CHF0038LS	3.8	1"	47698929001	CHE0038LS	47699453001
CHF0038LR	3.8	1"	47698946001	CHE0038LR	47699454001
CHF0038LA	3.8	1"	47698963001	CHE0038LA	47699455001
CHF0067LM	6.7	1 1/2"	47698913001	CHE0067LM	47699456001
CHF0067LS	6.7	1 1/2"	47698930001	CHE0067LS	47699457001
CHF0067LR	6.7	1 1/2"	47698947001	CHE0067LR	47699458001
CHF0067LA	6.7	1 1/2"	47698964001	CHE0067LA	47699459001
CHF0082LM	8.2	1 1/2"	47698914001	CHE0082LM	47699460001
CHF0082LS	8.2	1 1/2"	47698931001	CHE0082LS	47699461001
CHF0082LR	8.2	1 1/2"	47698948001	CHE0082LR	47699462001
CHF0082LA	8.2	1 1/2"	47698965001	CHE0082LA	47699463001
CHF0100LM	10.0	2"	47698915001	CHE0100LM	47699464001
CHF0100LS	10.0	2"	47698932001	CHE0100LS	47699465001
CHF0100LR	10.0	2"	47698949001	CHE0100LR	47699466001
CHF0100LA	10.0	2"	47698966001	CHE0100LA	47699467001
CHF0133LM	13.3	2"	47698916001	CHE0133LM	47699468001
CHF0133LS	13.3	2"	47698933001	CHE0133LS	47699469001
CHF0133LR	13.3	2"	47698950001	CHE0133LR	47699470001
CHF0133LA	13.3	2"	47698967001	CHE0133LA	47699471001
CHF0167LM	16.7	2"	47698917001	CHE0167LM	47699472001
CHF0167LS	16.7	2"	47698934001	CHE0167LS	47699473001
CHF0167LR	16.7	2"	47698951001	CHE0167LR	47699474001
CHF0167LA	16.7	2"	47698968001	CHE0167LA	47699475001
CHF0200LM	20.0	3"	47698918001	CHE0200LM	47699476001
CHF0200LS	20.0	3"	47698935001	CHE0200LS	47700078001
CHF0200LR	20.0	3"	47698952001	CHE0200LR	47700079001
CHF0200LA	20.0	3"	47698969001	CHE0200LA	47700080001
CHF0260LM	26.0	3"	47698919001	CHE0260LM	47700081001
CHF0260LS	26.0	3"	47698936001	CHE0260LS	47700082001
CHF0260LR	26.0	3"	47698953001	CHE0260LR	47700083001
CHF0260LA	26.0	3"	47698970001	CHE0260LA	47700084001
CHF0305LM	30.5	3"	47698920001	CHE0305LM	47700085001
CHF0305LS	30.5	3"	47698937001	CHE0305LS	47700086001
CHF0305LR	30.5	3"	47698954001	CHE0305LR	47700087001
CHF0305LA	30.5	3"	47698971001	CHE0305LA	47700088001
CHF0038LM	38.3	3"	47698921001	CHE0038LM	47700089001
CHF0038LS	38.3	3"	47698938001	CHE0038LS	47700090001
CHF0038LR	38.3	3"	47698955001	CHE0038LR	47700091001
CHF0038LA	38.3	3"	47698972001	CHE0038LA	47700092001
CHF0450LM	45.0	3"	47698922001	CHE0450LM	47700093001
CHF0450LS	45.0	3"	47698939001	CHE0450LS	47700094001
CHF0450LR	45.0	3"	47698956001	CHE0450LR	47700095001
CHF0450LA	45.0	3"	47698973001	CHE0450LA	47700096001

Filter elements must be replaced at least every 12 months

SALES CONDITIONS & PRICES

Prices are valid for orders received on or after 1st June 2025

Prices shown are in the currency indicated ex-works (Incoterms 2000) Lonate Pozzolo, Italy with the following exceptions:

- Vane
  – EXW Redditch, UK
- Spares Parts
  – EXW Lonate, Italy/ Tongeren, Belgium
- FM90-132
  – EXW Simmern Germany

In the case of a discrepancy in price, the Champion system is the system of record containing the correct price.

Individual quotations and orders are subject to the standard terms and conditions.

The products contained within the price list are manufactured in compliance with EU directives and other national standards.

Champion reserve the right to make changes to the design and execution and accept no liability for errors or misprints.

Champion reserves the right to modify these prices at any time providing 30 days written notification.

Technical details in price book are for reference only and subject to change. For full technical details and in case of discrepancy the technical data sheets contain the correct information.

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Website:
www.ChampionAirtech.com

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