NEW GENERATION HIGHLY EFFICIENT SCREW COMPRESSORS

At a glance...



Nominal Pressure 5 - 13 bar g



Motor Power 30 - 75kW



Volume Flow 1.19 - 13.5 m³/min





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.

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 CO₂ 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 indepth 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



FM FIXED SPEED - FMRS VARIABLE SPEED SERIES

FMRS



 Energy savings and lower CO₂ 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.

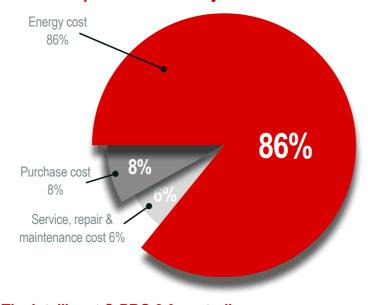
Compressor energy cost example

NOMINAL kW	YEAR R KWh (€)					
KVV	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.

CHAMPION FM30RS

Cost of compressed air over 5 years



FM RS STIEXIAL R

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

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	m³/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										

EN 10226 G1 1/4 (DIN 2999-G1 1/4) female

	OPTIONAL
CONFIG_F0-F4_380_VOLT	Alternative Voltage 380/3/60Hz
CONFIG_iConn	iConn Factory Fitted
ZS1216381	iConn Retrofit Kit NETT PRICE
CC1180793	Extended Warranty 5 years
CONFIG_F0-F4_AD2000	AD2000 (internal separator vessel)
CONFIG_F3_FOODGRADE	Factory Fitted Food Grade Oil 30-45 kW

Connection

30-45 kW	
SERVICE & PAR	TS
Annual Service Kit FM30	CC1198084
Advanced Service Kit FM30	CC1198090
Major Service Kit FM30	CC1198096
Annual Service Kit FM37-45	CC1198085
Advanced Service Kit FM37-45	CC1198091
Major Service Kit FM37-FM45	CC1198097
ChampLube Screw Lubricant 20 Ltr	CC1180020
AEON SCFG 8000 5 Ltr	ZS1216903
AEON SCFG 8000 20 Ltr	ZS1216945
AEON SCFG 8000 208 Ltr	ZS1216946
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^{*} Service intervals are by calendar months or operating hours, whichever occurs first. In dirty ambient conditions service interval must be halved.

FM FIXED SPEED - FMRS VARIABLE SPEED SERIES

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	TYPE	FM30RS	FM37RS	FM45RS
CODE		CC1195739	CC1195740	CC1195741
Pressure Range	bar		5 - 13	
Flow rate min - max	m³/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 CONFIG_F0-F4_380_VOLT 380/3/60Hz CONFIG_iConn iConn Factory Fitted iConn Retrofit Kit ZS1216381 **NETT PRICE** Extended Warranty 5 years CC1180793 AD2000 CONFIG_F0-F4_AD2000 (internal separator vessel) Factory Fitted Food Grade Oil **CONFIG F3 FOODGRADE** 30-45 kW **SERVICE & PARTS** Annual Service Kit FMRS30 CC1198086 Advanced Service Kit CC1198092 FMRS30 Major Service Kit FM30 RS CC1198098 Annual Service Kit CC1198087 FMRS37-45 Advanced Service Kit CC1198093 FMRS37-45 Major Service Kit FMRS37-CC1198099 FMRS45 ChampLube Screw Lubricant CC1180020 20 Ltr (x2) AEON SCFG 8000 5 Ltr ZS1216903 AEON SCFG 8000 20 Ltr ZS1216945 AEON SCFG 8000 208 Ltr ZS1216946

^{*} Service intervals are defined by calendar months or operating hours, whichever occurs first. In dirty ambient conditions service interval must be halved.

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	m³/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		05	
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EN 10226 G2 (DIN 2999-G2) female

Compressered Air Delivery Connection				
OPTIONAL				
Alternative Voltage 380/3/60Hz	CONFIG_F0-F4_380_VOLT			
iConn Factory Fitted	CONFIG_iConn			
iConn Retrofit Kit NETT PRICE	ZS1216381			
Extended Warranty 5 years	CC1180793			
AD2000 (internal separator vessel)	CONFIG_F0-F4_AD2000			
Factory Fitted Food Grade Oil 55-75 kW	CONFIG_F4_FOODGRADE			
SERVICE & PARTS				
Annual Service Kit FM55-75	CC1198088			
Advanced Service Kit FM55-75	CC1198094			
Major Service Kit FM55	CC1198100			
Major Service Kit FM75	CC1198101			
AEON SCFG 8000 5 Ltr	ZS1216903			
AEON SCFG 8000 20 Ltr	ZS1216945			
AEON SCFG 8000 208 Ltr	ZS1216946			

^{*} Service intervals are defined by calendar months or operating hours, whichever occurs first. In dirty ambient conditions service interval must be halved.

FM FIXED SPEED - FMRS VARIABLE SPEED SERIES

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	TYPE	FM55RS	FM75RS	
CODE		CC1195752	CC1195753	
Pressure Range	bar	5 - 10	5 - 13	
Flow rate min - max	m³/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	0004 44-0 4-0-		
Connection		EN 10226 G2 (DIN 2999-G2) female		

Connection	
OPTIONAL	
Alternative Voltage 380/3/60Hz	CONFIG_F0-F4_380_VOLT
iConn Factory Fitted	CONFIG_iConn
iConn Retrofit Kit NETT PRICE	ZS1216381
Extended Warranty 5 years	CC1180793
AD2000 (internal separator vessel)	CONFIG_F0-F4_AD2000
Factory Fitted Food Grade Oil 55-75 kW	CONFIG_F4_FOODGRADE
SERVICE & PARTS	
Standard Service Kit FMRS55-75	CC1198089
Advanced Service Kit FMRS55-75	CC1198095
Major Service Kit FM55-FM75 RS	CC1198102
ChampLube Screw Lubricant 20 Ltr (x2) (55-90Kw)	CC1180020
AEON SCFG 8000 5 Ltr	ZS1216903
AEON SCFG 8000 20 Ltr	ZS1216945
AEON SCFG 8000 208 Ltr	ZS1216946

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