

# Screw Compressors 2.2 - 7.5 kW

KA - KA Plus Series



Smart and affordable

# KA - KA Plus

A new series of technologically advanced compressors, resulting from an accurate research and development process.

The result is an extremely quiet compressor, environmentally friendly thanks to a reduced current consumption and the use of easily recyclable materials.

#### Noise Levels

Very low noise levels have been reached (61-66db) thanks to appropriate canalisation of the air flow for the benefit of the environment and the user, as well as an optimised cooling.

# Operating only when needed

The Start/Stop operating mode allows operation of the compressor only when needed, with a consequent reduction in energy consumption.

All KA compressors are designed with a Start/Stop key and direct activation of the hour counters and the pressure gauge.





# Air basic 2 control unit (optional for KA 4-5-6-7)

This electronic control unit is easy to use and allows the compressor to be fully managed. Controlled elements include, the star-delta motor, the rotation direction, the ON OFF operation with automatic discharge of pressure when the machine is stopped, all remote controls, all protection and warning alarms, in addition to a complete series of messages connected with ordinary maintenance.

# Air/oil separation system

Increased reliability combined with reduced piping and connections is made possible by an integrated block acting as air-oil separation and filter. The effectiveness of filtering ensures extremely low levels of residual oil, equal to 3 ppm max. This block houses oil filter, oil separation filter, minimum pressure valve, safety valve, oil thermostat and check valve.





### Suction valve

Improved fluid-mechanical efficiency is ensured by a new vertical design suction valve. Intake-air flows through a straight-line path, which guarantees lower load loss. ON/OFF operation and unloading is controlled via a solenoid valve. This valve concept has been specially designed to keep the number of components down to a minimum, so as to ensure long-lasting durability and low maintenance requirements.

### Reduced maintenance costs

The panel structure provides easy access from all sides. Components subject to ordinary maintenance (air cartridge, oil cartridge, oil separator, belts, oil loading and discharge) can be all reached from the same side.

#### **Transmission**

The pre-tested belt transmission is installed with balanced cast iron pulleys and bevel bearing. Belts are of quality construction to ensure the utmost reliability. The belt tensioning system has been simplified thanks to a single adjustment screw, which guarantees easier control and replacement.





#### Low noise level enclosure

Appropriate canalisation of the air flow provides minimum sound (noise levels at 64 db) for the benefit of the environment and machine operators. It also ensures optimised cooling.

## Standard equipment

- Star/Delta start (Premium versions)
- Air Basic 2 control unit (Premium versions)
- Direct start-up
- Overload relay
- Start/Stop control key with pressure switch (KA2-KA5)

- Start/Stop push-button. On/Off main switch (Premium versions)
- IP55 electric motors, insulation class: F
- Oil level monitoring, inspection window
- Transmission belt
- Oil thermostat

- Safety devices for:
  - Motor overheating
  - Compressor overheating, automatic stop at 110 °C
- Indicators of the operating conditions:
  - Pressure
  - Hour counter
- Cover with epoxy powder coating
- · First filling in factory
  - AEON 3000 lubricator

# Maintenance is as easy as ever

#### Fast and easy service

These compressors are designed to ensure easy access to maintenance points. All 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.

#### Service network

Our large network of approved Champion dealers is always at your service to ensure the smooth running of your compressor and ensure the swift supply of replacement parts for different system needs.

#### **Aftersales service**

Champion offers a full range of aftersales services to fulfil all customer requirements. Using original and genuine parts will ensure customers save time and money over the life of the compressor.

# KA package compressors

# With cooling cycle dryer, filters and tank

The KA Package compressors can be easily and rapidly installed in any environment. The basic version can be customised to meet the most stringent application requirements.

The ideal solution for an integrated compressor

#### **5X1 = KA PACKAGE**

- 1 Compressor
- 2 Dryer
- 3 Tank
- 4 Automatic discharger of dew
- 5 Kit of filters



With the introduction of EDT, the new generation of energy-saving refrigeration dryers, our industry not only redeveloped its product offering for the compressed air treatment but also the concept of thermal storage operation, that led to the international success of the EDT dryers. The new FlexiDry offers important advantages in terms of energy saving, reliability and operating costs as the EDT dryer is able to adapt itself to the real needs of the compressed air system. The dryers regulation system controls the dryer operation, ensuring the most effective method of compressed air drying, in turn achieving high energy saving and excellent dew point stability in dynamic conditions.

- New high efficiency heat exchanger
- Highest energy savings
- Minimum pressure drops
- Lowest environmental impact
- Reduced carbon footprint
- Easy installation
- · Easy serviceability
- Maximum reliability









# **Optional**

A series of options are available to ensure a complete and integrated solution. The KA Package compressors can be fitted with a kit of filters complete with by-pass, which guarantee that air is treated before entering the plant, in turn reducing the creation of dew inside the network. An automatic dew discharger for tanks is also available, which, once installed and programmed, will periodically discharge any dew present inside the tank. To protect the compressor when installed in particularly dusty environments, or poor environmental conditions, the KA systems can be equipped with an anti-dust panel, which ensures good filtration of the intake cooling air.



# Technical data

# KA



Model	Ref							Tank		Weight	Dimensions	Out
		m³/min	cfm	HP	kW	Bar	dB(A)	liters	Volt/Hz	kg	L x W x H mm	BSP
KA 2	CMP1026757B	0.24	8.48	3	2.2	10	61	-	0	106	620 x 600 x 840	1/2"
KA 3	CMP1026766B	0.36	12.72	4	3	10	61	-	VOLT 400/3/50			
KA 4	CMP1026767B	0.53	18.73	5.5	4	10	62	-				
KA 4 PREMIUM	CMP1031244B1	0.53	18.73	5.5	4	10	62	-				
KA 5	CMP1026756B	0.67	23.67	7.5	5.5	10	66	-				
KA 5 PREMIUM	CMP1031242B1	0.67	23.67	7.5	5.5	10	66	-	>	119		
KA TANK												
KA 2/270	CMP1026758B	0.24	8.48	3	2.2	10	61	270	VOLT 400/3/50	191	1540 x 600 x 1400	1/2"
KA 3/270	CMP1026759B	0.36	12.72	4	3	10	61	270				
KA 4/270	CMP1026760B	0.53	18.73	5.5	4	10	62	270				
KA 4/270 PREMIUM	CMP1034065B1	0.53	18.73	5.5	4	10	62	270				
KA 5/270	CMP1026761B	0.67	23.67	7.5	5.5	10	66	270		227		
KA 5/270 PREMIUM	CMP1034068B1	0.67	23.67	7.5	5.5	10	66	270		221		
KA 4/500	CMP1026739B	0.53	18.73	5.5	4	10	62	500	VOL	274	- 1950 x 680 x 1520	1/2"
KA 4/500 PREMIUM	CMP1034066B1	0.53	18.73	5.5	4	10	62	500		2/4		
KA 5/500	CMP1026740B	0.67	23.67	7.5	5.5	10	66	500		287		
KA 5/500 PREMIUM	CMP1034069B1	0.67	23.67	7.5	5.5	10	66	500				
					KA PACK	AGE						
KA 2/EDT/270	CMP1026762B	0.24	8.48	3	2.2	10	61	270		210	1540 x 600 x 1400	1/2"
KA 3/EDT/270	CMP1026763B	0.36	12.72	4	3	10	61	270	VOLT 400/3/50			
KA 4/EDT/270	CMP1026764B	0.53	18.73	5.5	4	10	62	270		214		
KA 4/EDT/270 PREMIUM	CMP1034071BE	0.53	18.73	5.5	4	10	62	270		214		
KA 5/EDT/270	CMP1026765B	0.67	23.67	7.5	5.5	10	66	270		227		
KA 5/EDT/270 PREMIUM	CMP1034074BE	0.67	23.67	7.5	5.5	10	66	270		221		
KA 4/EDT/500	CMP1026741B	0.53	18.73	5.5	4	10	62	500	VOL.	274	- 1950 x 680 x 1520	1/2"
KA 4/EDT/500 PREMIUM	CMP1034072BE	0.53	18.73	5.5	4	10	62	500				
KA 5/EDT/500	CMP1026742B	0.67	23.67	7.5	5.5	10	66	500		287		
KA 5/EDT/500 PREMIUM	CMP1034075BE	0.67	23.67	7.5	5.5	10	66	500		207		

## **KA Plus**



Model	Ref							Tank		Weight	Dimensions	Out
		m³/min	cfm	HP	kW	Bar	dB(A)	liters	Volt/Hz	kg	L x W x H mm	BSP
KA 6 - 10 bar	CMP1116429	0.92	33	10	7.5	10	68	-	VOLT 400/50/3	145	680 x 600 x 1160	3/4"
KA 6 - 13 bar	CMP1116430	0.80	28	10	7.5	13	68	-				74
KA 7 - 8 bar	CMP1053384	1.12	40	10	7.5	8	67	-		148	680 x 600 x 1160	3/4"
KA 7 - 10 bar	CMP1053385	0.95	34	10	7.5	10	67	-				
KA 7 - 13 bar	CMP1053386	0.74	26	10	7.5	13	67	-				
KA TANK												
KA 6 / 270	CMP1116431	0.92	33	10	7.5	10	68	270	VOLT 400/50/3	230	1540 x 600 x 1560	3/4"
KA 6 / 270	CMP1116432	0.80	28	10	7.5	13	68	270				74
KA 7 / 270	CMP1053387	1.12	40	10	7.5	8	67	270		233	1540 x 600 x 1560	3/4"
KA 7 / 270	CMP1053388	0.95	34	10	7.5	10	67	270				
KA 7 / 270	CMP1053389	0.74	26	10	7.5	13	67	270				
KA 6 / 500	CMP1116433	0.92	33	10	7.5	10	68	270		290	1950 x 680 x 1635	3/4"
KA 6 / 500	CMP1116434	0.80	28	10	7.5	13	68	270				
KA 7 / 500	CMP1053390	1.12	40	10	7.5	8	67	500		293	1950 x 680 x 1635	3/4"
KA 7 / 500	CMP1053391	0.95	34	10	7.5	10	67	500				
KA 7 / 500	CMP1053393	0.74	26	10	7.5	13	67	500				
					KA PACK	AGE						
KA 6/EDT/270	CMP1116437	0.92	33	10	7.5	10	68	270	VOLT 400/50/3	253	1540 x 600 x 1560	3/4"
KA 6/EDT/270	CMP1116438	0.80	28	10	7.5	13	68	270				/ 4
KA 7/EDT/270	CMP1053394BE	1.12	40	10	7.5	8	67	270		300	1540 x 600 x 1560	3/4"
KA 7/EDT/270	CMP1053395BE	0.95	34	10	7.5	10	67	270		300		
KA 7/EDT/270	CMP1053396BE	0.74	26	10	7.5	13	67	270		313	1950 x 680 x 1635	
KA 6/EDT/500	CMP1116439	0.92	33	10	7.5	10	68	500				3/4"
KA 6/EDT/500	CMP1116440	0.80	28	10	7.5	13	68	500				1/4
KA 7/EDT/500	CMP1053397BE	1.12	40	10	7.5	8	67	500		316	1950 x 680 x 1635	
KA 7/EDT/500	CMP1053398BE	0.95	34	10	7.5	10	67	500				3/4"
KA 7/EDT/500	CMP1053399BE	0.74	26	10	7.5	13	67	500				

<sup>\*</sup> Air flow rate measured according to standards ISO 1217, ed.4, ANNEX E – 2009 and test code / Pneurop/Cagi PN 2 CPTC2 at the following working pressure: 7 bar versions at 7.5/8/8,5 bar; 9 bar versions at 10 bar; 12 bar versions at 13 bar.

\*\* Sound pressure level measured according to standards ISO 2151 and ISO 3744 at 1 m distance in a free field.

WARNING: in particular indoor installation environments, the noise may increase by as much as 6\_10 dB(A) due to sound reflections against the walls. The manufacturer may change the above-mentioned technical specifications without prior notice.



# Smart and affordable

Champions piston compressor range is designed to cover all the possible professional uses of compressed air. Our piston compressors in various forms and sizes, provide a truly complete range of choice.



#### Champion stationary rotary screw compressors,

both fixed and variable speed drive, are the answer to the needs of industry and of small/medium-sized companies.

The complete range is designed for continuous operation under the most severe conditions of use, with particular attention to modularity, energy consumption, low operating and maintenance costs, and ease of installation and use.



A modern production system and process demands increased levels of air quality.

Our complete **Air Treatment Range** ensures product quality and efficient operation.



champion.eu@gardnerdenver.com www.championcompressors.eu

For additional information please contact your local representative.

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