### **KA-KAPLUS SERIES**



KA3

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KA5

CHAMPION

SMART COMPRESSOR DESIGN

#### At a glance...



**Nominal Pressure** 10 bar q



Motor Power 2.2 - 5.5kW



Volume Flow 0.24 - 0.67 m<sup>3</sup>/min



# A 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 power consumption and the use of easily recyclable materials.

#### Noise levels

Very low noise levels have been reached (61 - 66 dB(A)) thanks to optimised air and cooling, allowing the installation of the compressor at the point of use.

#### **Start/Stop operation**

The Start/Stop mode reduces the energy consumption as the compressor runs only when needed.

## C-PRO 1.0 control unit (optional for KA 4 and 5)

The C-PRO 1.0 electronic controller provides the user with data on total hours of operation, operating temperature and additional information such as:



- Air filter replacement
- · Oil filter replacement
- Separator filter replacement
- Oil change

- Regular maintenance advice
- Pressure setting adjustment can be easily adjusted via the controller



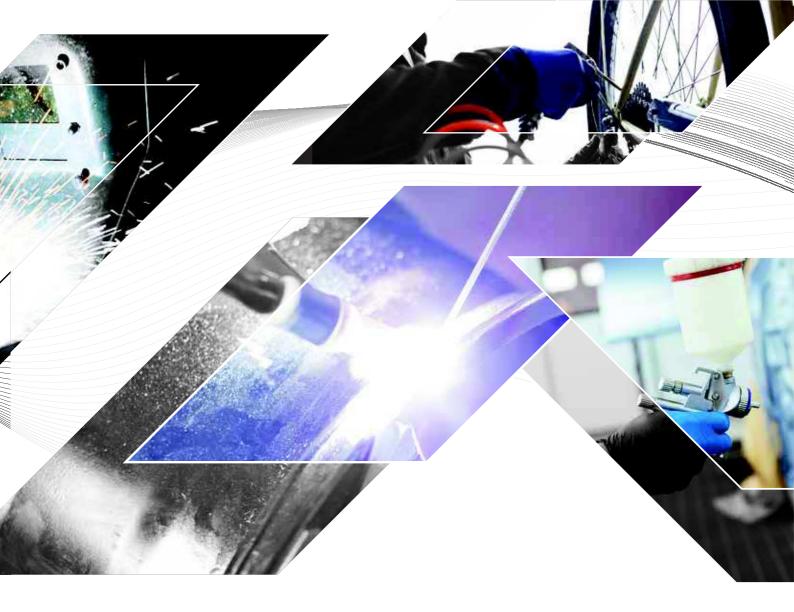
Increased reliability combined with reduced piping and connections is made possible by an integrated block acting as air-oil separation and filter. The effectiveness of filtering ensures extremely low levels of residual oil, equal to 3 ppm max. This block houses oil filter, oil separation filter, minimum 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 to a minimum, so as to ensure long-lasting durability and low maintenance requirements.





#### **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.

#### **Standard equipment**

- Star / Delta start (Premium versions)
- C-PRO 1.0 control unit (Premium versions)
- Overload relay
- Start / Stop control key with pressure switch (KA2-KA5)
- Start / Stop push-button. ON / OFF main switch (premium versions)
- IE 3 electric motors, insulation class: F
- Oil level monitoring, visual level indicator
- Transmission belt
- · Oil thermostat
- Safety devices for:
  - Motor overheating
  - Compressor overheating, automatic stop at 110 °C
- Indicators of the operating conditions:
  - Pressure
  - Hour meter
- Enclosure with epoxy powder coating

## KA package compressors with cooling cycle dryer, filters and tank

The KA package compressors can be easily and quickly installed in any environment.

#### **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 condensate in the network.





## CT: Energy saving refrigeration dryers

With the introduction of CT, 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 CT dryers. The new FlexiDry offers important advantages in terms of energy saving, reliability and operating costs as the CT 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



## 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**

### KA 2-5 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 5.5kW – IE3



KA SERIES	TYPE	KA 2	KA 3	KA 4	KA 5
CODE		CMP1026757B1	CMP1026766B1	CMP1026767B1	CMP1026756B1
Maximum pressure	bar	10	10	10	10
Capacity at maximum pressure	m³/min	0.24	0.36	0.53	0.67
Drive motor IP 55 / class F – IE3	kW	2.2	3	4	5.5
Operating voltage, 50 – 60Hz	380 – 400V	•	•	•	•
Noise level	dB(A)	61	61	62	66
Air cooled		•	•	•	•
Weight	kg	106	106	106	119
Dimensions [L x W x H]	mm	620 x 600 x 840			
OUT BSP		1/2"	1/2"	1/2"	1/2"

COMPRESSOR MOUNTED ON 270 LT TANK						
Code		CMP1026758B1	CMP1026759B1	CMP1026760B1	CMP1026761B1	
Weight	kg	191	191	191	204	
Dimensions [L x W x H]	mm	1,540 x 600 x 1,400				
COMPRESSOR MOUNTED ON 500 LT TANK						
Code		-	-	CMP1026739B1	CMP1026740B1	
Weight	kg	_	_	251	264	
Dimensions [L x W x H]	mm	-	-	1,950 x 680 x 1,520	1,950 x 680 x 1,520	
PACKAGE VERSION, KA / CT / 270 <sup>1</sup> ]						
Code		CMP1026762BE2	CMP1026763BE2	CMP1026764BE2	CMP1026765BE2	
Weight	kg	213	213	220	231	
Dimensions [L x W x H]	mm	1,540 x 600 x 1,400				
PACKAGE VERSION, KA / CT / 500 <sup>1</sup>						
Code		-	-	CMP1026741BE2	CMP1026742BE2	
Weight	kg	_	_	280	291	
Dimensions [L x W x H]	mm	-	-	1,950 x 680 x 1,520	1,950 x 680 x 1,520	
PREMIUM VERSION (COMPLETE WITH C-PRO 1.0 ELECTRONIC CONTROLLER)						
COMPRESSOR BASE LOAD						
Code		-	-	CMP1031244B1	CMP1031242B1	
COMPRESSOR MOUNTED ON 270 LT TANK						
Code		-	-	CMP1034065B1	CMP1034068B1	
COMPRESSOR MOUNTED ON 500 LT TANK						
Code		-	-	CMP1034066B1	CMP1034069B1	
PACKAGE VERSION, KA / CT / 270 <sup>1</sup>						
Code		-	-	CMP1034071BE2	CMP1034074BE2	
PACKAGE VERSION, KA / CT / 500 <sup>1</sup>						
Code		-	-	CMP1034072BE2	CMP1034075BE2	

OPTIONAL				
Alternative voltage, 230V / 50 – 60Hz <sup>3</sup> ]				
Alternative voltage, 230V / 50Hz 1 – phase				
Filter Kit with bypass for dryer CT <sup>2</sup> installed	CC1179488			
Filter Kit with bypass for dryer CT <sup>2</sup> installed	CC1179489			
Automatic drain discharge	CC1032413			
Anti-corrosion %				
SERVICE & PARTS				
Service Kit for every 4000h or 12 months	CC1089649			
Service Kit for every 8000h or 24 months	CC1089650			
ChampLUBE Screw Lubricant 3 x 4 Litres	CC1180019			

Ompressor mounted on tank with refrigeration cycle dryer (CT).
Dew point + 3° C with compressor air inlet temperature + 35° and per ISO 7183



<sup>&</sup>lt;sup>2]</sup> Kit includes PRE FILTER, COALESCENT FILTER and BY–PASS

 $<sup>^{\</sup>scriptscriptstyle 3]}$  Only for KA 2–3 and KA 4–5 Premium