

## VIJAČNI KOMPRESORJI 11-132kW SERVO SERIJA DIREKTNO GNANI S FREKVENČNIM REGULATORJEM WK15 SERVO

### Frequency Controlled Screw Compressor - Appendix

Stationary, fully automatic, sound muffled in compact design.



#### WK 15 SERVO - Single-stage, air-cooled, electrically driven screw compressor system with coolant injection; Frequency-controlled - Directly drive

<b>Screw compressor block</b>	Performance optimized screw profile Wendel W3
<b>Drive motor</b>	<ul style="list-style-type: none"> <li>- Servo Motor: Tamsan</li> <li>- Engine power: 15.0 kW drive motor</li> <li>- Drive motor: 96.5% efficiency</li> <li>- Insulation class: F</li> <li>- Degree of protection: IP 23</li> <li>- Design: IE4 B35</li> </ul>
<b>Converter</b>	Dann Foss / Mitsubishi converter
<b>Suction filter</b>	Generously dimensioned air intake filter
<b>Separation system</b>	Long-term separator cartridge for constant. Coolant - residual content of 2-4 mg/m <sup>3</sup>
<b>Coolant</b>	Mineral: 46 or better, filling 11 l
<b>Lubricant circuit</b>	TÜV certified water bowl filled with mineral oil, lubricants cooler, filter and thermal block
<b>Cooling</b>	<ul style="list-style-type: none"> <li>- Air-cooled coolant and compressed air aftercooler</li> <li>- Integrated centrifugal separator with el. Condensate drain</li> <li>- Ambient Temperature Min./Max. +0/+45°C</li> <li>- Full cooling air density</li> <li>- Compressed air outlet temperature 10-12°C over ambient</li> <li>- Integrated Compact fan, 1.5 kW, 6000 m<sup>3</sup>/h</li> </ul>
<b>Cabinet</b>	Integrated, degree of protection IP 54, emergency Stop, Siemens
<b>Control and monitoring:</b>	
<b>Control</b>	<b>Logika</b>
<ul style="list-style-type: none"> <li>- Display</li> <li>- Display</li> <li>- Input</li> <li>- K -continuous display</li> </ul>	<ul style="list-style-type: none"> <li>- LCD Display</li> <li>- Symbol display of all important operating states</li> <li>- Via Control Panel, code protected</li> <li>- Plant in operation/ Standby / Load Test</li> <li>- Remote closing active</li> <li>- Automatic Restart</li> <li>- Final compression pressure</li> <li>- Final compression temperature</li> <li>- Operating mode: automatic, continuous optimization</li> <li>- Automatic mode</li> </ul>
<b>Pressure Sensor</b>	Sensor
<b>Error Messages</b>	Symbols and/or info Short Text
<b>Maintenance messages</b>	Symbols and/or info Short Text
<b>Options</b>	<ul style="list-style-type: none"> <li>- Interface for remote control</li> <li>- Various analogue and digital inputs and outputs</li> <li>- Collective fault message floating</li> </ul>
<b>Trim</b>	<ul style="list-style-type: none"> <li>- Temperature protected sound-absorbing hood with sound-absorbing lining</li> <li>- Large maintenance doors</li> <li>- Elastic storage unit on a stable</li> <li>- Sheet steel base frame</li> </ul>

<b>Options</b>	Preheating heating
<b>Compact unit</b>	Length x depth x height: 900 x 1200 x 1200 mm Weight: 370 kg Noise level 66 dB(A) at a distance of 1m Compressed air connection: R 3/4" Paint: White RAL 9016, gray RAL 7001
<b>Electrical Installation</b>	Electrical Connection: 400V/50Hz/3 phases Cable size: 5 x 4.0mm (within 15m) 40 A hedge (carrier)

All technical data are specified in accordance with the DIN ISO 1217 Appendix C.

**MANUFACTURER OF THE MAIN COMPONENTS IN THE ESSENTIAL (PREFERABLY):**

Compressor stage: Wendel

Air filter: Spin-on

Oil filter and separator: MAN

		WK-11 SERVO			WK-15 SERVO			WK-22 SERVO		
Operating pressure (bar)		6	7	10	6	7	10	6	7	10
Operating pressure (psi g)		84	98	140	84	98	140	84	98	140
COMPRESSOR TECHNICAL DETAILS	Free air delivery at max pressure (m <sup>3</sup> /min)	0,45-1,90	0,45-1,80	0,45-1,50	0,61-2,60	0,61-2,45	0,45-1,90	0,91-4,07	0,91-3,91	0,91-3,20
	Free air delivery at max pressure (m <sup>3</sup> /h)	114	108	90	156	147	114	244,2	234,6	192
	Free air delivery at max pressure (cfm)	67	64	53	92	87	67	144	138	113
	( kW/m <sup>3</sup> /m)	5,79	6,11	7,33	5,77	6,12	7,89	5,41	5,63	6,88
	Operation Oil Temperature (C)	78-82			78-82			78-82		
	Thermostat Oil Inlet Temperature(C)	71			71			71		
	Delivery Air Temperature ( at 20 C)	30			30			30		
	Oil Content (lt)	10			10			10		
	Airline Connection (G)	3/4"			3/4"			1"		
	Noise level 1m distance at C.P. (dB(A))	66			66			66		
Manufacturer	WENDEL			WENDEL			WENDEL			
Airend Type	Oil Injected			Oil Injected			Oil Injected			
Rotation Speed (rpm)	3000	2800	2400	3000	2800	2400	3400	3300	2700	
KW	11			15			22			
Manufacturer										
Origin										
Main Motor Power (kw)[hp]	11 [15]			15 [20]			22 [30,1]			
Main Motor Speed (rpm)	3000			3000			3000			
Protection Class	IP23			IP23			IP23			
Frame Construction	B35			B35			B35			
Demurrage Current (A)(380V)	-			-			-			
Frequency	50-60			50-60			50-60			
Energy Class	IE4			IE4			IE4			
Motor Bearing	NO BEARING			NO BEARING			NO BEARING			
Insulation Class	F			F			F			
Cooling Design	AXIAL FAN			AXIAL FAN			AXIAL FAN			
Cooling Fan Air Flow Condition (m3/h)	6000			6000			6000			
Fan Static Pressure at max. Flow (Pa)	112			112			112			
Fan Motor Power (kw) [hp]	1,5			1,5			1,5			
Fan Motor Speed (rpm)	3000			3000			3000			
Nominal Current (A)(380V)	2			2			2			
Radiator	Monoblock			Monoblock			Monoblock			
Cooling Air Outlet Temp.(at 25C)	40			40			40			
Manufacturer										
Transmission System				Direct Drive by shaft connection.						
Pulley Design				no coupling						
Electric component	DANFOSS/Mitsubishi			DANFOSS/Mitsubishi			DANFOSS/Mitsubishi			
Electric supply (V)	380/400			380/400			380/400			
Cable size (15mt.)										
Maximum Current (A)(380V)										
Load Current(A)(380V)	29A			29A			41A			
Unload Current(A)(380V)										
Main Fuse	40 A			40 A			63 A			
Control Panel	Tamtronic /Logika			Tamtronic /Logika			Tamtronic /Logika			
Temperature switch	Digital / Analog			Digital / Analog			Digital / Analog			
Air Tank Capacity (Recommended)	1000 lt			1000 lt			1000 lt			
Air Dryer	-			-			-			
Pressure dewpoint [°C] at ambient temp. 20°C,	-			-			-			
Line Filter ( prefilter for water)	-			-			-			
<i>Air Tank, Air Dryer and Dryer filters on the TK series, only air tank on the T serie.</i>										
Dimensions (W X L X H) (cm)										
Pack Dimensions (W X L X H) (cm)										
Weight [ kg]										
Panel Filter Norm	EU3			EU3			EU3			
Moving	By Forklift/crane			By Forklift/crane			By Forklift/crane			
Isolation	Fireproof Foam			Fireproof Foam			Fireproof Foam			
Air Intake Kit	Tamsan HF 40 NC			Tamsan HF 40 NC			Tamsan HF 65 NC			
Seperator Filter	Spin-on Filter			Spin-on Filter			Spin-on Filter			
Oil Filter	Spin-on Filter			Spin-on Filter			Spin-on Filter			
Air Filter	MANN type Heavy duty			MANN type Heavy duty			MANN type Heavy duty			
Working Switch	4-20 mA transmitter			4-20 mA transmitter			4-20 mA transmitter			
Safety Valve	CE Italy			CE Italy			CE Italy			
Min.Pressure Valve /Check Valve	TAMSAN			TAMSAN			TAMSAN			

**2 years factory warranty - Guarantee supply parts for 10 years**

Our company reserves the right to change technical details without notice , this details can be different upon to countries.

All technical Datas in DIN ISO 1217 Annex C