

## VIJAČNI KOMPRESORJI 18-315kW DD SERIJA DIREKTNO GNANI WK90 DD

### Screw Compressor System

Stationary, fully automatic, sound muffled in compact design.



#### WK 90 DD - Single-stage, air-cooled, electrically driven screw compressor system with coolant injection - Directly drive

<b>Screw compressor block</b>	Performance optimized screw profile Rotorcomp
<b>Drive motor</b>	<ul style="list-style-type: none"> <li>- Induction motor: OMEGA / Watt</li> <li>- Motor power: 90.0 kW</li> <li>- Efficiency of: 86.5%</li> <li>- Insulation class: F</li> <li>- Degree of protection: IP 55</li> <li>- Design: IE3 B35</li> </ul>
<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 48 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, 4.0 kW, 23670 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> <ul style="list-style-type: none"> <li>- Display</li> <li>- Display</li> <li>- Input</li> <li>- K -continuous display</li> </ul>	<b>Logika</b> <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: 1600 x 2100 x 1900 mm Weight approx: 2000 kg Noise level 88 dB(A) at a distance of 1m Compressed air connection: R 2" Paint: White RAL 9016, gray RAL 7001
<b>Electrical Installation</b>	Electrical Connection: 400V/50Hz/3 phases Cable size: 5 x 35.0mm (max 15m) Hedging 200A (slow)

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: Rotor comp

Air filter: Spin-on

Oil filter and separator: MAN

	WK 90 DD			WK 110 DD			WK 132 DD			
	7	10	13	7	10		7	10		
COMPRESSOR TECHNICAL DETAILS	Operating pressure (bar)	7	10	13	7	10	7	10		
	Operating pressure [psi.g]	98	140	182	98	140	98	140		
	Free air delivery at max pressure (m <sup>3</sup> /min)	15,8	12,7	-	19,8	15,2		22,5	19,8	
	Free air delivery at max pressure (m <sup>3</sup> /h)	948	762	-	1188	912		1350	1188	
	Free air delivery at max pressure (cfm)	553	444,5	-	693	532		787,5	693	
	(kW/m <sup>3</sup> /h)	6,64	7,09	-	2,78	3,62		3,33	3,79	
	Operation Oil Temperature (C)		79			79			79	
	Thermostat Oil Inlet Temperature(C)		71			71			71	
	Delivery Air Temperature ( at 20 C)		30			30			30	
	Oil Content (lt)		52			52			52	
TRANSMISSION SYSTEM	Airline Connection (G)		2"			2"		2"		
	Noise level 1m distance at C.P. [dB(A)]		79			79		81		
	Manufacturer	CTRL 170SX/CTRL 135L			CTRL 170S/CTRL 170SX			CTRL 170SX/CTRL 135L		
	Origin									
	Airend Type	Oil Injected			Oil Injected			Oil Injected		
	Rotation Speed (rpm)	3000	3000		3000	3000		3000	3000	
	Manufacturer	OMEGA			OMEGA			OMEGA		
	Origin	Turkey			Turkey			Turkey		
	Main Motor Power (kw)[hp]	90 Kw			110 KW			132 KW		
	Main Motor Speed (rpm)	2950			2950			2950		
MAIN MOTOR DETAILS	Protection Class	IP55			IP55			IP55		
	Frame Construction	B35			B35			B35		
	Demurrage Current (A)(380V)	-			-			-		
	Frequency	50-60			50-60			50-60		
	Energy Class	IE3			IE3			IE3		
	Insulation Class	F			F			F		
	Cooling Design	Additional Cooling Fan			Additional Cooling Fan			Additional Cooling Fan		
	Cooling Fan Air Flow Condition	27000			27000			27000		
	Fan Static Pressure at max. Flow [Pa]	200			200			200		
	Fan Motor Power (kw) [hp]	4 KW			4 KW			4 KW		
COOLING SYSTEM	Fan Motor Speed (rpm)	1420			1420			1420		
	Nominal Current (A)(380V)	7,7 A			7,7 A			7,7 A		
	Radiator	Monoblock			Monoblock			Monoblock		
	Cooling Air Outlet Temp.(at 25C)	35			35			35		
	Manufacturer	TAMSAN			TAMSAN			TAMSAN		
	Transmission System	Direct Drive			Direct Drive			Direct Drive		
	Design	HRC			HRC			HRC		
	Electric component	Siemens			Siemens			Siemens		
	Invertor Brand									
	Electric supply (V)	380-400			380-400			380-400		
TRANSMISSION SYSTEM	Cable size (15mt.)	3x70mm+25			3x95+35			3x95+35		
	Maximum Current (A)(380V)	175			213 A			253 A		
	Load Current(A)(380V)	160			192			240		
	Unload Current(A)(380V)	53			58A			75		
	Main Fuse	-			-			-		
	Control Panel	Logika Italy			Logika Italy			Logika Italy		
	Temperature switch	Electronic			Electronic			Electronic		
	Air Tank Capacity (Recommended)	1000 lt /2000 lt			1000 lt /2000 lt			2000 lt		
	Air Dryer	-			-			-		
	Pressure dewpoint [°C] at ambient	-			-			-		
CONTROL PANNEL	Line Filter ( prefilter for water)	-			-			-		
	Dimensions (W X L X H) [cm]	1600 x 2600 x 1900			1600 x 2600 x 1900			1600 x 2600 x 1900		
	Pack Dimensions (W X L X H) [cm]	1320 x 2050 x 1920			1320 x 2050 x 1920			1320 x 2050 x 1920		
	Weight [ kg]	1200			1550			1750		
	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	HF85/Normally Closed			HF85/Normally Closed			HF85/Normally Closed		
	Separator Filter	Inline Separator			Inline Separator			Inline Separator		
	Oil Filter	Spin-on Filter by TAMSAN			Spin-on Filter by TAMSAN			Spin-on Filter by TAMSAN		
AIR TANK AND DRYER	Air Filter	Heavy duty			Heavy duty			Heavy duty		
	Working Switch	Transmitter 4-20 mA			Transmitter 4-20 mA			Transmitter 4-20 mA		
	Safety Valve	CE Italy			CE Italy			CE Italy		
	Safety switch	yes			yes			yes		
	Hose	135 C Teflon			135 C Teflon			135 C Teflon		
	<b>2 years factory warranty - Guarantee supply parts for 10 years</b>									
	Our company reserves the right to change technical details without notice , this details can be different upon to countries.									
	Manuel controller's upgrade norm will be used for Tamtronic Controller switch DIN ISO 1217 Annex C									