

VIJAČNI KOMPRESORJI 5.5-132kW E VSD SERIJA S FREKVENČNIM REGULATORJEM WK45 E VSD

Frequency Controlled Screw Compressor - Appendix

Stationary, fully automatic, sound muffled in compact design.



WK 45 E VSD - Single-stage, air-cooled, electrically driven screw compressor system with coolant injection; Frequency-controlled - Belt Drive

Screw compressor block	Performance optimized screw profile Wendel F 12
Drive motor	- Induction motor: OMEGA / Watt - Motor power: 45.0 kW - Efficiency of: 86.5% - Insulation class: F - Degree of protection: IP 55 - Design: IE3 B35
Converter	Dan Foss / Mitsubishi converter
Suction filter	Generously dimensioned air intake filter
Separation system	Long-term separator cartridge for constant. Coolant - residual content of 2-4 mg/m ³
Coolant	Mineral: 46 or better, filling 30 l
Lubricant circuit	TÜV certified water bowl filled with mineral oil, lubricants cooler, filter and thermal block
Cooling	- Air-cooled coolant and compressed air aftercooler - Integrated centrifugal separator with el. Condensate drain - Ambient Temperature Min./Max. +0/+45°C - Full cooling air density - Compressed air outlet temperature 10-12°C over ambient - Integrated Compact fan, 2.2 kW, 12000 m³/h
Cabinet	Integrated, degree of protection IP 54, emergency Stop, Siemens
Control and monitoring:	
Control	Logika
- Display - Display - Input - K -continuous display	- LCD Display - Symbol display of all important operating states - Via Control Panel, code protected - Plant in operation/ Standby / Load Test - Remote closing active - Automatic Restart - Final compression pressure - Final compression temperature - Operating mode: automatic, continuous optimization - Automatic mode
Pressure Sensor	Sensor
Error Messages	Symbols and/or info Short Text
Maintenance messages	Symbols and/or info Short Text
Options	- Interface for remote control - Various analogue and digital inputs and outputs - Collective fault message floating
Trim	- Temperature protected sound-absorbing hood with sound-absorbing lining - Large maintenance doors - Elastic storage unit on a stable - Sheet steel base frame

Options	Preheating heating
Compact unit	Length x depth x height: 1300 x 1550 x 1750 mm Weight approx: 1200 kg Sound level at a distance of 1m 85 dB(A) Compressed air connection: R 1½" Paint: White RAL 9016, gray RAL 7001
Electrical Installation	Electrical Connection: 400V/50Hz/3 phases Cable size: 5 x 16.0mm (max 15m) Hedging 125 A (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: Wendel

Air filter: Spin-on

Oil filter and separator: MAN

		WK 45 VSD New			WK 55 VSD			WK 75 VSD		
		7	10	13	7	10	13	7	10	13
		98	140	182	98	140	182	98	140	182
COMPRESSOR TECHNICAL DETAILS	Operating pressure (bar)	7	10	13	7	10	13	7	10	13
	Operating pressure [psi g]	98	140	182	98	140	182	98	140	182
	Free air delivery at max pressure (m³ /min)	3,20-8,10	3,20-7,10	3,20-6,01	3,20-9,60	3,20-8,20	3,20-7,20	4,80-12,01	4,80-10,50	4,80-9,10
	Free air delivery at max pressure (m³ /h)	486	426	360,6	576	492	432	720,6	630	546
	Free air delivery at max pressure (cfm)	283,5	248,5	210,35	336	287	252	420,35	367,5	318,5
	(kW/m³ /h) (kW/m³ /h) (kW/m³ /h)	5,56	6,34	7,49	5,73	6,71	7,64	6,24	7,14	8,24
	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)	30			30			30		
TRANSMISSION SYSTEM	Airline Connection (G)	1 1/2"			1 1/2"			2"		
	Noise level 1m distance at C.P. [dB(A)]	85			85			85		
	Manufacturer	Wendel W 12			Wendel W 12			Wendel W 12		
	Origin	Turkey			Turkey			Turkey		
MAIN MOTOR DETAILS	Airend Type	Oil Injected			Oil Injected			Oil Injected		
	Rotation Speed (rpm)	3500	2800	2300	4300	3400	2800	5300	4400	3600
	Manufacturer	VOLT/WEG/ELEKTROMER			VOLT/WEG/ELEKTROMER			VOLT/WEG/ELEKTROMER		
	Origin	Turkey			Turkey			Turkey		
	Main Motor Power (kw)[hp]	45 [60,3]			55 [73,7]			75 [100,5]		
	Main Motor Speed (rpm)	2950			2950			2950		
	Protection Class	IP55			IP55			IP55		
	Frame Construction	B3			B3			B3		
	Demurrage Current (A)(380V)	161A			196A			237A		
	Frequency	50			50			50		
COOLING SYSTEM	Energy Class	Q2e			Q2e			Q2e		
	Insulation Class	F			F			F		
	Cooling Design	Additional Cooling Fan			Additional Cooling Fan			Additional Cooling Fan		
	Cooling Fan Air Flow Condition	12000			12000			12000		
	Fan Static Pressure at max. Flow [Pa]	168,2			168,2			168,2		
	Fan Motor Power (kw) [hp]	2,2[2,95]			2,2[2,95]			2,2 [2,95]		
	Fan Motor Speed (rpm)	1420			1420			1420		
	Nominal Current (A)(380V)	8,7A			8,7A			8,7A		
	Radiator	Monoblock			Monoblock			Monoblock		
	Cooling Air Outlet Temp.(at 25C)	35			35			35		
TRANSMISSION SYSTEM	Manufacturer	TURKISH			TURKISH			TURKISH		
	Transmission System	Poly v			Poly v			Poly v		
	Pulley Design	Design			Design			Design		
	Electric component	Siemens			Siemens			Siemens		
	Electric supply (V)	400			400			400		
	Cable size (15mt.)	5x16mm			5x16mm			5x25mm		
	Maximum Current (A)(380V)	87A			107A			146A		
	Load Current(A)(380V)	81A			100A			136A		
CONTROL PANEL	Unload Current(A)(380V)	50A			58A			83A		
	Main Fuse	125A			125A			160A		
	Control Panel	Electronic			Electronic			Electronic		
	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 temp. 20°C, 30% r.h. and Refrigerant	-			-			-		
	Line Filter (prefilter for water)	-			-			-		
	AIR TANK AND DRYER	Air Tank, Air Dryer and Dryer filters on the TK series, only air tank on the T serie.								
Dimensions (W X L X H) [cm]		127 x 170 x 177			127 x 170 x 177			125 x 170 x 177		
Pack Dimensions (W X L X H) [cm]		132 x 175 x192			132 x 175 x192			132 x 175 x 192		
Weight [kg]		830			1310			1570		
Panel Filter Norm		EU3			EU3			EU3		
Moving		By Forklift / Crane			By Forklift /Crane			By Forklift/Crane		
Isolation		Fireproof Foam			Fireproof Foam			Fireproof Foam		
Air Inteke Kit		HF85			HF85			HF85		
Separator Filter		Inline Separator			Inline Separator			Inline Separator		
CANOPY FEATURES		Oil Filter	Spin-on Filter by TAMSAN			Spin-on Filter by TAMSAN			Spin-on Filter by TAMSAN	
	Air Filter	MANN type Heavy duty			MANN type Heavy duty			MANN type 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		
	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.									
	Manuel controller's upgrade norm will be used for Tamtronic Controller switch DIN ISO 1217 Annex C									