

1. COMPRESSOR

DATA SHEET

Compressor type	C4U114.4GPW		
Number off	1		
Number of stages / cylinders	4 / 6		
Mode of cooling	water-cooled		
Mode of lubrication	with oil, under pressure		
P&I Diagram	TBA		
General Arrangement drawing	TBA		
Gas, gas composition ⁴	CH496.29 C2H62.26 i-C5 0.05 C3H80.82	i-C4 0.07 n-C4 0.13 N2 0.113 CO20.185	%
Humidity	50 mg/Nm3 max allowed		

INLET PRESSURE 5 BAR[A] (DESIGN)

Operating case (rotation speed)	Design	
Outlet capacity at 0 °C and 1.013 bar[a]	250	Nm ³ /h
Suction pressure	5	bar[a]
Suction temperature	+20	°C
Ambient temperature	+20	°C
Cooling water temperature inlet	+20	°C
Req. cooling water volume (30% glycol)	0.9	l/s
Approx. Room ventilation capacity (for 10°C room increase)	1.24	m3/h
Discharge pressure	301	bar[a]
Shaft power input	46.8	kW
Electric power eff., considering belt slippage and motor efficiency	55	kW
Selected motor power	75	kW

INLET PRESSURE 3.5 BAR[A] (PS MIN)

Operating case (rotation speed)	Design	
Outlet capacity at 0 °C and 1.013 bar[a]	174	Nm ³ /h
Suction pressure	3.5	bar[a]
Suction temperature	+20	°C
Ambient temperature	+20	°C
Cooling water temperature inlet	+20	°C
Req. cooling water volume (30% glycol)	0.7	l/s
Approx. Room ventilation capacity (for 10°C room increase)	0.97	m3/h
Discharge pressure	301	bar[a]
Shaft power input	36.6	kW
Electric power eff., considering belt slippage and motor efficiency	42	kW

INLET PRESSURE 6 BAR[A] (PS MAX.)

Operating case (rotation speed)	Design	
Outlet capacity at 0 °C and 1.013 bar[a]	302	Nm ³ /h
Suction pressure	6	bar[a]
Suction temperature	+20	°C
Ambient temperature	+20	°C
Cooling water temperature inlet	+20	°C
Req. cooling water volume (30% glycol)	1.02	l/s
Approx. Room ventilation capacity (for 10°C room increase)	1.41	m ³ /h
Discharge pressure	301	bar[a]
Shaft power input	53.2	kW
Electric power eff., considering belt slippage and motor efficiency	62	kW

GENERAL DATA

Compressor speed	765	rpm
Piston stroke	100	mm
Weight compressor, including motor	approx. 5550	kg
Ambient temperature without crankcase heater	min. / max. +10 / +35	°C
Ambient temperature with crankcase heater	min. / max. -10 / +35	°C
Compressor suction temp.	min. / max. ⁵ +15 / +30	°C
Remaining oil aerosol content, without filtration device	approx. 40	mg/Nm ³
Remaining oil aerosol content, with coalescence filter only	approx. 1	ppm[w]
Sound pressure level measured at 1m distance, free radiation and low basic noise (acc. to ISO 3746)	approx. 82	dB (A)

2. ELECTRIC MOTOR

3 phase squirrel-cage induction motor (the MCC is mounted in the control cabinet)

Starting power in star delta configuration with 75 kW motor (I_n = 131 A), starting current 393 A.

Tolerances on power supply 400V AC: +10/-10%

Frequentie 50Hz: ± 5%

Arrangement	IM B3	
Degree of protection	IP55	
Insulation class	F (B)	
Power	75	kW
Speed	1460	rpm
Starting	Star-Delta	