

MOLL-MOTOR

THREE PHASE INDUCTION MOTOR - SQUIRREL CAGE
EXPROOF (ATEX) MOTOR

IE3

DATE: 01.01.2024

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REV: 01

Type : 3ZL180M4C-PA-BA-162		Date : 01.01.2024	
Power [kW]	: 18.5	Efficiency Class	: IE3
Input Voltage [V]	: 400	Duty Cycle	: S1
Connection Type [Δ / Y]	: Δ	Service Factor	: 1.00
Frequency [Hz]	: 50	Frame Size	: 180M
Pole Number	: 4	Weight [kg]	: 128
Nominal Speed [rpm]	: 1475	Insulation Class	: F [155°C]
Nominal Current [A]	: 35.0	Temperature Rise	: B [80°K]
Nominal Moment [Nm]	: 120	Protection Class	: IP66
Nominal Efficiency [η]	: 92.6	Vibration Severity Grade	: A
Power Factor [cosφ]	: 0.82	Method of Cooling	: IC411 (TEFC)
Locked Rotor Current [Ia/In]	: 7.7	Direction of Rotation	: Bidirectional
Locked Rotor Torque [Ma/Mn]	: 3.0	Balance	: Half Key
Breakdown Torque [Mk/Mn]	: 3.3	Motor Thermal Protection	: PTC (140°C)
Motor Color	: RAL 7031	ATEX Certification Number	: IEP 23 ATEX 1306X
Ambient Temperature	: -20°C / +40°C	ATEX Classification (Gas)	: II 3G Ex ec IIC T4 Gc
		ATEX Classification (Dust)	:
Sound Pressure Level [dBA]	: 64		: Zone 2/22

ELECTRICAL DATA										
Δ / Y	U [V]	f [Hz]	P [kW]	n [rpm]	I [A]	η [%100]	η [%75]	η [%50]	Cosφ	CI
Δ	400	50	18.5	1475	35.0	92.6	93.2	92.9	0.82	IE3
Y	690	50	18.5	1475	20.2	92.6	93.2	92.9	0.82	IE3
Δ	460	60	18.5	1775	30.6	93.6	93.7	93.0	0.81	IE3
Δ	460	60	21.5	1775	34.7	93.6	93.8	93.0	0.83	IE3

MECHANICAL DATA		TERMINAL BOX	
Moment of Inertia [kgm ²]	: 0.12901	Terminal Box Material	: Aluminum
Bearing [DS / NS]	: 6310ZZ / 6210ZZ	Terminal Box Position	: Top
Frame Material	: Aluminum	Terminal Box Cable Entry	: 2xM32x1.5
Flange Type / Material	: B5 / Aluminum	Terminal Box Gland Material	: Metal
Cooling Fan Material	: Plastic	Contact Screw Thread	: M6
End Shield Material	: Aluminum		

