

Datasheet 2SIE 280M4 B3

General data	
Article no.:	1428M004035IE2B
3-Phase motor type:	2SIE 280M4 B3
Output:	90 kW
Manufacturer:	Cantoni Motor
Frame size:	280
Number of poles:	4
Efficiency class:	IE2 High Efficiency
Flange/feet:	Feet
Mounting:	B3 (IM 1001) or derivatives
Isolation class:	F (155°C) temperature rise-class B (80K)
Duty type:	S1 (continuous)
Ambient temperature:	-20 to +40°C
Altitude:	≤ 1000 m.a.s.l.
Service factor:	1
Cooling method:	IC411 (TEFC)
Protection:	IP55
Tropicalisation:	No
Motor weight:	700 kg

Electrical data (calculated values)			
Rated Voltage (U_N):	400	690	V
Rated frequency (F_N):	50	50	Hz
Connection:	Δ	Y	
Rated output:	90	90	kW
Rated speed:	1489	1489	rpm
Efficiency:	94,3	94,3	%
Power factor:	0,88	0,88	
Rated current:	157,0	90,6	A
Starting current:	973,4	562,0	A
Factor starting current:	6,2	6,2	
Nominal torque:	578,00	578,00	Nm
Starting torque:	982,6	982,6	Nm
Factor starting torque:	1,7	1,7	
Breakdown torque:	1271,6	1271,6	Nm
Factor breakdown torque:	2,2	2,2	

Load characteristics							
Load:	0	25	50	75	100	125	%
Efficiency at 50Hz:			94,5	94,7	94,3		%
Efficiency at 60Hz:							%

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Mechanical data

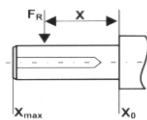
Moment of inertia:	1,5 kgm ²	Painting:	RAL 5010 (Gentian Blue)
Sound pressure level:	According IEC 60034-9	Frame material:	Cast Iron
Bearing DE:	6318 C3	Shields material:	Cast Iron
Bearing NDE:	6318 C3	Feet material:	Cast iron - integrated
Bearing system:	Regreasable	Terminal box position:	Top
Bearing fixation:		Cable glands size:	M63 (2x), M16 (1x)
Balancing vibration class:	A (half-key)	Cable glands direction:	To right
Direction of rotation:	CW or CCW		

Shaft

Shaft dimensions:	Ø75 x 140 mm
Key dimensions:	125 x 20 x 12 mm
Thread of center hole:	M20

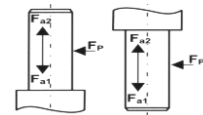
Horizontal operation:

$F_R (X=0)$	6,5 kN
$F_R (X=\max)$	5,5 kN



Vertical operation:

F_p	4,9 kN
F_{a1}	3,4 kN
F_{a2}	6,9 kN



Standards

Rating and performance:	IEC 60034-1
Methods for determining losses and efficiency:	IEC 60034-2-1
Classification of degrees of protection:	IEC 60034-5
Methods of cooling:	IEC 60034-6
Symbols of construction and mounting arrangements:	IEC 60034-7
Terminal markings and direction of rotation:	IEC 60034-8
Noise limits:	IEC 60034-9
Dimensions and output of electric machines:	IEC 60072-1
Vibration limits:	IEC 60034-14

Special remarks

Inclusive PTC 140°C

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