

## Datasheet II3D 2SIE 180M-4

General data	
Article no.:	1318M004035IE2B
3-Phase motor type:	II3D 2SIE 180M-4
Output:	18,5 kW
Manufacturer:	Cantoni Motor
Frame size:	180
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:	169 kg

Electrical data (calculated values)			
Rated Voltage ( $U_N$ ):	<b>400</b>	<b>690</b>	V
Rated frequency ( $F_N$ ):	<b>50</b>	<b>50</b>	Hz
Connection:	$\Delta$	Y	
Rated output:	<b>18,5</b>	<b>18,5</b>	kW
Rated speed:	<b>1470</b>	<b>1470</b>	rpm
Efficiency:	<b>91,2</b>	<b>91,2</b>	%
Power factor:	<b>0,86</b>	<b>0,86</b>	
Rated current:	<b>34,0</b>	<b>19,6</b>	A
Starting current:	<b>255,0</b>	<b>147,2</b>	A
Factor starting current:	<b>7,5</b>	<b>7,5</b>	
Nominal torque:	<b>120,20</b>	<b>120,20</b>	Nm
Starting torque:	<b>336,6</b>	<b>336,6</b>	Nm
Factor starting torque:	<b>2,8</b>	<b>2,8</b>	
Breakdown torque:	<b>360,6</b>	<b>360,6</b>	Nm
Factor breakdown torque:	<b>3,0</b>	<b>3,0</b>	

Load characteristics							
Load:	0	25	50	75	100	125	%
Efficiency at 50Hz:			90,2	91,3	91,2		%
Efficiency at 60Hz:			91,7	92,6	92,4		%

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## Mechanical data

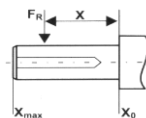
Moment of inertia:	0,139 kgm <sup>2</sup>	Painting:	RAL 5010 (Gentian Blue)
Sound pressure level:	62 dB(A)	Frame material:	Cast Iron
Bearing DE:	6311 2Z C3	Shields material:	Cast Iron
Bearing NDE:	6311 2Z C3	Feet material:	Cast iron - integrated
Bearing system:	Service life lubrication	Terminal box position:	Top
Bearing fixation:	Drive-End	Cable glands size:	M40 (2x)
Balancing vibration class:	A (half-key)	Cable glands direction:	To right
Direction of rotation:	CW or CCW		

## Shaft

Shaft dimensions:	Ø48 x 110 mm
Key dimensions:	100 x 14 x 9 mm
Thread of center hole:	M16

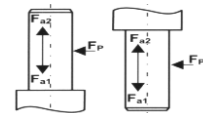
### Horizontal operation:

$F_R (X=0)$	3,6 kN
$F_R (X=\max)$	1,3 kN



### Vertical operation:

$F_p$	3,6 kN
$F_{a1}$	1,1 kN
$F_{a2}$	1,3 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

II3D T3Dc IP55 Non Conductive Dust