

SIEMENS

SIMOTICS M-1FE1 synchronous built-in motor



Figure similar

MLFB-Ordering data

1FE1093-6WV31-1BC2

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data

Rated power	16.8 kW
Rated speed	1600 rpm
Rated torque	100.0 Nm
Rated current	43 A
Static torque	100.00 Nm
Static current	43.00 A
Maximum speed	7000 rpm
Maximum torque	165.0 Nm
Maximum current	86 A
Rotor moment of inertia	301.7 kgcm ²
VPM module *	Voltage limitation required (VPM or IVP)

Physical constants

Voltage constant at 20° C	168.0 V/1000*min ⁻¹
Winding resistance at 20° C	0.2900 Ω
Rotary field inductance	6.80 mH
Thermal time constant	3 min
Net weight of rotor	10.5 kg
Net weight of stator	28.0 kg
Total net weight	38.5 kg

Mechanical data

Motor length	250 mm
Outer diameter stator	205.0 mm
Inner diameter rotor	80.0 mm
Stator design	with cooling jacket
Rotor design	with rotor sleeve (large bore diameter)
Motor protection	Cast winding with full protection (2 temperature sensors + 3 PTCs)
Temperature monitoring	KTY84 temperature sensor in the stator winding
Cable outlet	Free cable ends 500 mm (cable outlet at the larger outside housing diameter)
Scope of delivery	Stator + Rotor

* VPM: Voltage Protection Module