

Data sheet for SIMOTICS T-1FW3



Figure similar

Article No. : **1FW3281-3AM73-5AA0-Z
T20+X01**

Client order no. :

Item no. :

Order no. :

Consignment no. :

Offer no. :

Project :

Remarks :

Engineering data

	P_N [kW]	M_N [Nm]	I_N [A]	n_N [rpm]	M_{max} [Nm]	I_{max} [A]	$n_{max, inv}$ [rpm]	M_0 [Nm]	I_0 [A]
ALM 400V	138.0	2,200	255	600	4,050	510	1,050	2,500	290
ALM 480V	157.0	2,050	245	730	4,050	510	1,050	2,500	290
SLM 400V	123.0	2,250	260	520	4,050	510	1,050	2,500	290
SLM 480V	146.0	2,150	250	650	4,050	510	1,050	2,500	290

Mechanical data

Motor type	Permanent-magnet synchronous motor
Shaft height	280
Cooling	Water cooling
Vibration severity grade	Grade A
Shaft and flange accuracy	Tolerance N (at normal running temperature)
Degree of protection	IP54
Design acc. to Code I	IM B35
Temperature monitoring	KTY84 temperature sensor in the stator winding
Color	Jet black, matt RAL 9005
Type of the bearing	Normal (Standard)
Shaft extension	Hollow shaft
Encoder system	Incremental encoder sin/cos 1 Vpp 2048 S/R with C and D tracks (encoder IC2048S/R)
Encoder mounting system	Belt-mounted
Sound pressure level $L_{pA}(1m)$ motor rated load, tolerance + 3dB	73 dB ¹⁾

Limiting data

Max. permissible speed (mech.)	1,000 rpm
Max. permissible speed (inverter)	1,050 rpm
Maximum torque	4,050 Nm
Maximum current	510 A

Physical constants

Thermal time constant	10 min
Moment of inertia	3.78 kgm ²
Weight (approx.)	600 kg

Connection

Type of electrical connection	Terminal box for power cable, connector for encoder signals and temperature sensor
Terminal box position	Transverse right
Power connection	Terminal box top

Special design

T20	Shaft cover at NDE
X01	Paint finish: Jet black, matt RAL 9005

¹⁾ at 4 kHz rated pulse frequency at the rated operating point