

Torque motors

SIMOTICS T torque motors for SINAMICS S120

SIMOTICS T-1FW6 – Water cooling

Motor type (repeated)	Stall current 1)3)	Rated current 2)3)	Maxi- mum current ²⁾	Calculated power	SINAMICS S120 Motor Module		Power cable with complete shield Motor connection via power connector ⁴⁾		
	I_0	I_{rated}	I_{max}	$P_{el, max}$	Required rated current	Booksize format For other versions and components, see SINAMICS S120 drive system	Power con- nector	Cable cross- section ⁵⁾	Pre-assembled basic cable to drive system
	A	A	A	kW (HP)	I_{rated} / I_{max}		Size	mm ²	Article No.
1FW6290-0.B07-5G..	56	52	119	46.6 (62.49)	60/113	6SL312-1 TE26-0AA.	1.5	4 × 16	6FX8002-5CS24-....
1FW6290-0.B07-0LB.	101	86	212	68.6 (92.07)	132/210	6SL312-1 TE31-3AA.	–	–	–
1FW6290-0.B07-2PB.	129	105	272	82.9 (111.17)	200/282	6SL312-1 TE32-0AA.	–	–	–
1FW6290-0.B11-7A..	63	59	133	57.2 (76.71)	85/141	6SL312-1 TE28-5AA.	1.5	4 × 16	6FX8002-5CS24-....
1FW6290-0.B11-0LB.	101	91	212	76.6 (102.72)	132/210	6SL312-1 TE31-3AA.	–	–	–
1FW6290-0.B11-2PB.	129	114	272	91.2 (122.30)	200/282	6SL312-1 TE32-0AA.	–	–	–
1FW6290-0.B15-7A..	63	60	133	64 (85.82)	85/141	6SL312-1 TE28-5AA.	1.5	4 × 16	6FX8002-5CS24-....
1FW6290-0.B15-0LB.	101	94	212	83.8 (112.38)	132/210	6SL312-1 TE31-3AA.	–	–	–
1FW6290-0.B15-2PB.	129	118	272	98.7 (132.36)	200/282	6SL312-1 TE32-0AA.	–	–	–
1FW6290-0.B20-0LB.	101	95	212	90.6 (121.49)	132/210	6SL312-1 TE31-3AA.	–	–	–
1FW6290-0.B20-2PB.	129	121	272	106 (142.15)	200/282	6SL312-1 TE32-0AA.	–	–	–

Cooling:
 Internal air cooling 0
 External air cooling 1

Motor Module:
 Single Motor Module 1

Length code

For information on the cables refer to
 MOTION-CONNECT connection systems

Accessories

Description	Article No.	Description	Article No.
Cooling connection adapter For SIMOTICS T-1FW6 built-in torque motors 1FW6160 ... 1FW6230 1FW6290	1FW6160-1BA00-0AA0 1FW6290-1BA00-0AA0	Power connector⁴⁾ For SIMOTICS T-1FW6 built-in torque motors - Size 1 for 4 × 2.5 mm² - Size 1.5 for 4 × 4/4 × 10/4 × 16 mm²	6FX2003-0LA00 6FX2003-0LA10
		Signal connector⁴⁾ For SIMOTICS T-1FW6 built-in torque motors M17 (socket) for 6 × 0.5 + 1 × 1.0 mm²	6FX2003-0SU07
		Signal cable, pre-assembled⁶⁾ For SIMOTICS T-1FW6 built-in torque motors	6FX8002-2SL10-....

¹⁾ Torque and current at low speeds.

²⁾ The values refer to a supply voltage of 400 V 3 AC ± 10 % (drive system DC link voltage 600 V DC).

³⁾ In case of water cooling with inlet temperature of 35 °C (95 °F) and maximum rotor flange temperature of 60 °C (140 °F).

⁴⁾ For type of connection with exposed core ends, power and signal connectors are not included in the scope of supply of the motor and must be ordered separately.

⁵⁾ The current carrying capacity of the power cables complies with EN 60204-1 for installation type C, for continuous duty at an ambient air temperature of 40 °C (104 °F).

⁶⁾ For length code, see MOTION-CONNECT connection systems.

MOTION-CONNECT connection systems

Accessories for power and signal cables

Power connectors/power and signal connectors for SIMOTICS T-1FW6 built-in torque motors

Overview



Power connector with screw-type connection

3 A to 30 A Motor Modules in booksize format are shipped without power connector, as this is already connected to the MOTION-CONNECT power cables.

Power connectors can also be ordered separately, e.g. for applications where installation of the motor cable would be difficult if a power connector were attached.

Overview



Power and signal connectors for SIMOTICS T-1FW6 built-in torque motors

Power and signal connectors 6FX2003 are designed to ensure optimum connection of SIMOTICS T-1FW6 built-in torque motors to the drive system.

Selection and ordering data

Description	Article No.
Power connector For Motor Modules 3 ... 30 A booksize format <u>with screw-type connection</u> (enclosure, insulator, 4 coding pins and 1 interlock bolt, screw-type connections Motor: 1.5 ... 10 mm ² , Holding brake: 1.5 mm ²)	6SL3162-2MA00-0AA0

Selection and ordering data

Description	Article No.
Power connectors for SIMOTICS T-1FW6 built-in torque motors - Size 1 for 4 × 2.5 mm² connectors with pins and full external thread - Size 1.5 for 4 × 4 mm²/4 × 6 mm²/ 4 × 10 mm²/4 × 16 mm² connectors with pins and full external thread	6FX2003-0LA00 6FX2003-0LA10
Signal connector for SIMOTICS T-1FW6 built-in torque motors M17 for 5 × 0.5 mm² + 1 × 1.0 mm² connectors with sockets and full-thread cap nut	6FX2003-0SU07

More information

A special tool is needed to crimp the contacts.
 For further information, please go to:
www.intercontec.biz