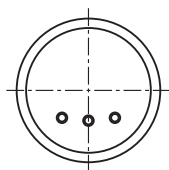


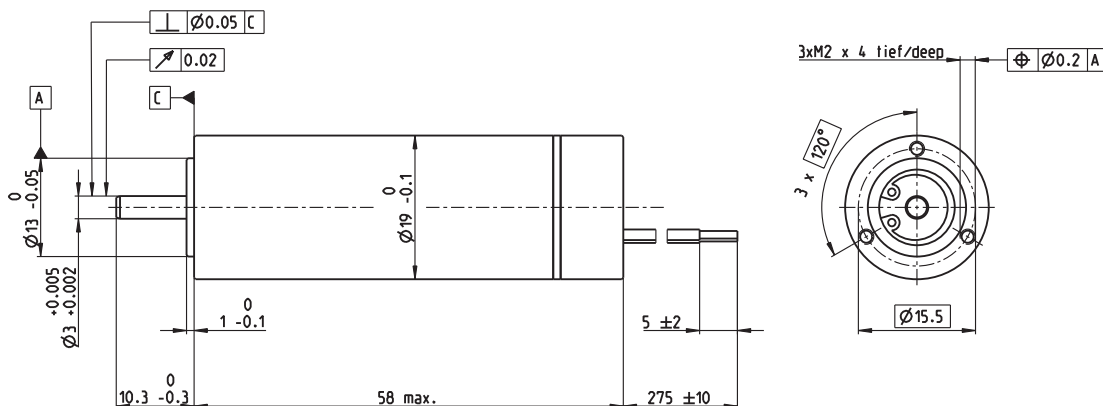
EC 19 Ø19 mm, brushless, 60 Watt

NEW



Lage des Kabelabganges zum Befestigungsbohrbild ± 25°

alignment of cables to mounting holes ± 25°



M 1:1

- Stock program
- Standard program
- Special program (on request)

Part Numbers

sensorless	475529	475530	474510	477254
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Motor Data (provisional)

Values at nominal voltage		18	24	30	36
1 Nominal voltage	V	18	24	30	36
2 No load speed	rpm	67100	69600	65200	67000
3 No load current	mA	406	324	232	203
4 Nominal speed	rpm	63600	66100	61700	63500
5 Nominal torque (max. continuous torque)	mNm	11.8	11.6	12.2	11.3
6 Nominal current (max. continuous current)	A	4.92	3.78	2.96	2.37
7 Stall torque	mNm	335	358	334	308
8 Starting current	A	131	109	76.3	60.5
9 Max. efficiency	%	89.4	89.6	89.5	88.9
Characteristics					
10 Terminal resistance phase to phase	Ω	0.137	0.22	0.393	0.595
11 Terminal inductance phase to phase	mH	0.0224	0.037	0.0658	0.0896
12 Torque constant	mNm/A	2.55	3.28	4.37	5.1
13 Speed constant	rpm/V	3740	2910	2180	1870
14 Speed/torque gradient	rpm/mNm	201	195	196	218
15 Mechanical time constant	ms	3.46	3.35	3.37	3.75
16 Rotor inertia	gcm ²	1.64	1.64	1.64	1.64

Specifications

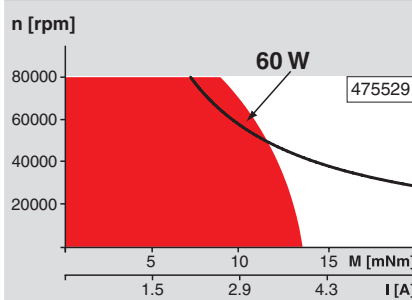
- Thermal data**
- 17 Thermal resistance housing-ambient: 10.7 K/W
 - 18 Thermal resistance winding-housing: 0.81 K/W
 - 19 Thermal time constant winding: 2.67 s
 - 20 Thermal time constant motor: 426 s
 - 21 Ambient temperature: -20...+100°C
 - 22 Max. permissible winding temperature: 120°C
- Mechanical data (preloaded ball bearings)**
- 23 Max. permissible speed: 80000 rpm
 - 24 Axial play at axial load < 3 N: 0 mm
 - > 3 N: max. 0.14 mm
 - 25 Radial play: preloaded
 - 26 Max. axial load (dynamic): 3 N
 - 27 Max. force for press fits (static) (static, shaft supported): 22 N
 - 1410 N
 - 28 Max. radial load, 5 mm from flange: 12 N
- Other specifications**
- 29 Number of pole pairs: 1
 - 30 Number of phases: 3
 - 31 Weight of motor: 80 g

Values listed in the table are nominal.

Connection motor (Cable AWG 22)

- red: Motor winding 1
- black: Motor winding 2
- white: Motor winding 3

Operating Range



Comments

- Continuous operation**
In observation of above listed thermal resistance (lines 17 and 18) the maximum permissible winding temperature will be reached during continuous operation at 25°C ambient. = Thermal limit.
- Short term operation**
The motor may be briefly overloaded (recurring).
- Assigned power rating**

maxon Modular System

Overview on page 20–25

Recommended Electronics:
ESCON Mod. 50/4 EC-S 343
Notes 24