

# DCmind BRUSHLESS MOTORS

## SQ75 motor with integrated SMi22 CANopen electronic board



- > DC Brushless motor for position, speed and torque control applications
- > High precision thanks to the 4096 position per turn magnetic encoder
- > CANopen Communication bus (CiA 301 compliant and implemented with CiA 402 drive profile)
- > Enhanced safety via 2 Safe Torque Off (STO) inputs
- > IP67 & IP69 direct drive according to IEC 60259 (except front face & shaft output)
- > Protection against wrong polarity



### General characteristics

Type	80350			80360			80370		
<b>Part numbers</b>	<b>80350001</b>			<b>80360001</b>			<b>80370001</b>		
Nominal operating range	V <sub>---</sub> 9 - 75			9 - 75			9 - 75		
<b>No-load characteristics</b>	<b>12V<sub>---</sub></b>	<b>24V<sub>---</sub></b>	<b>32V<sub>---</sub></b>	<b>24V<sub>---</sub></b>	<b>32V<sub>---</sub></b>	<b>48V<sub>---</sub></b>	<b>32V<sub>---</sub></b>	<b>48V<sub>---</sub></b>	<b>60V<sub>---</sub></b>
Speed of rotation	rpm 1 700	3 230	4 500	2 601	3 270	5 000	2 300	3 420	4 320
Absorbed current	A 1.1	1	2.4	1	1	0.9	1	1	1
Standby current ± 10 %	mA 50	50	50	50	50	50	50	50	50
<b>Nominal characteristics</b>	<b>12V<sub>---</sub></b>	<b>24V<sub>---</sub></b>	<b>32V<sub>---</sub></b>	<b>24V<sub>---</sub></b>	<b>32V<sub>---</sub></b>	<b>48V<sub>---</sub></b>	<b>32V<sub>---</sub></b>	<b>48V<sub>---</sub></b>	<b>60V<sub>---</sub></b>
Speed ± 10 %	rpm 1 380	3 000	3 845	2 230	2 960	4 540	2 000	3 130	3 890
Torque	N.m 1	1	1	1.3	1.3	1.3	1.9	1.9	1.9
Absorbed current	A 15.4	15.4	15.4	14.4	14.4	14.4	15.1	15.1	15.1
Output power ± 10 %	W 145	314	400	304	403	618	398	623	700
Efficiency	% 78	85	82	85	87	87	80	86	78
<b>Maximal characteristics</b>	<b>12V<sub>---</sub></b>	<b>24V<sub>---</sub></b>	<b>32V<sub>---</sub></b>	<b>24V<sub>---</sub></b>	<b>32V<sub>---</sub></b>	<b>48V<sub>---</sub></b>	<b>32V<sub>---</sub></b>	<b>48V<sub>---</sub></b>	<b>60V<sub>---</sub></b>
Speed	rpm 1 000	2 310	3 100	1 650	2 160	3 540	1 650	2 340	3 170
Torque	N.m 2.5	2.5	2.5	4	4	4	5	6	6
Output power ± 10 %	W 262	600	750	691	905	1 483	864	1 470	1 800
Absorbed current	A 34.5	34.5	34.5	42	42	42	40	44	44
Efficiency	% 60	74	68	67	69	71	67	70	68
<b>Other characteristics</b>									
Cogging Torque	mNm 45	45	45	50	50	50	55	55	55
Weight	Kg 2.4	2.4	2.4	2.7	2.7	2.7	3.3	3.3	3.3

### Accessories

Description	Part numbers
Starter kit: Dcmind Soft+CANopen software - Power/logic/CAN 3 m cables - USB to CANopen adaptor - CAN terminal resistor - CAN double connector	<b>79513105</b>
Power supply cable M16, 3 m length AWG18	<b>79298664</b>
Input-Output cable M16, 3 m length AWG24	<b>79513106</b>
CAN cable M12, 1 m length AWG26	<b>27358015</b>

### Combinations

① Choose The Motor

② Choose The Gearbox

You have a project? Contact us on [www.crouzet.com](http://www.crouzet.com)

#### Description:

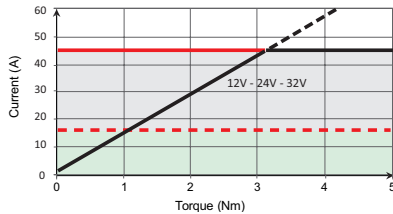
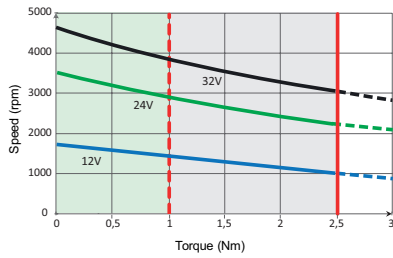
The new SQ75 DCmind Brushless motors have an integrated drive and CANopen communication bus for Motion Control applications up to 600 W nominal power and up to 6 Nm peak torque. More power, accurate precision, as well as enhanced safety and security features to secure your application.

For more information about Crouzet's SQ75 range, please visit [www.crouzet.com](http://www.crouzet.com).

## Curves

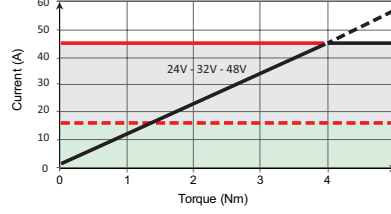
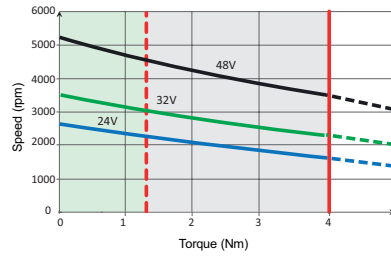
### Speed-torque and current-torque

80350



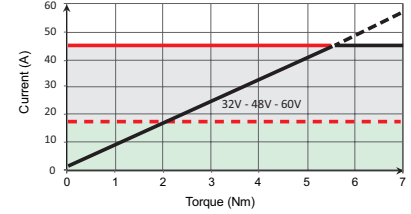
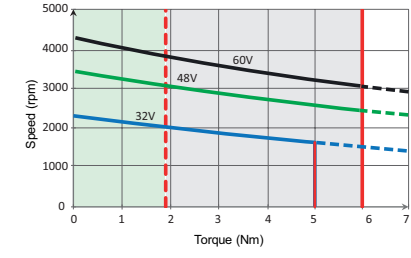
--- Nominal torque  
 — Peak torque

80360



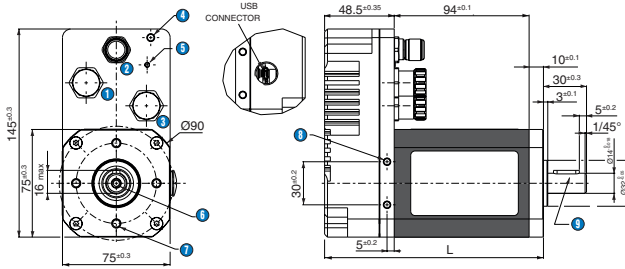
--- Nominal torque  
 — Peak torque  
 ■ Continuous running area  
 ■ Cycling running area

80370



## Dimensions (mm)

80350 - 80360 - 80370



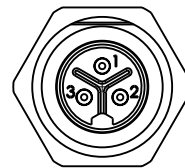
- 1 Logic connector
- 2 CAN connector
- 3 Power supply connector
- 4 M5 x 0.8 depth 7
- 5 2 colors LED for motor status
- 6 M5 x 0.8 depth thread 12
- 7 M6 x 1 at 90° on Ø56 depth 10.5
- 8 M5 x 0.8 depth 11.5
- 9 Parallel key 5 x 5 x 18 DIN 6885 A

L: 80350 140.6 max - L: 80360 153.1 max - L: 80370 178.1 max

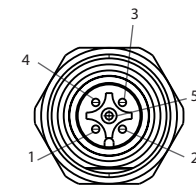
## Connection

Input / Output M16 connector - 18 pins			
Pin	Description	Pin	Description
1	Optional logic supply	14	0 volt
2	0 volt	15	STO2-
3	Input 6 (analogic 1)	16	STO2+
4	Input 5 (analogic 2)	17	STO1-
5	Input 1 (digital)	18	STO1+
6	Input 2 (digital)		
7	Input 3 (digital)		
8	Input 4 (digital)		
9	0 volt		
10	Output 1 (digital - PMW)		
11	Output 2 (digital - PMW)		
12	Output 3 (digital)		
13	Output 4 (digital)		

Pin	Power supply M16 - 3 pins
	Description
1	Output ballast
2	+VDC
3	0 volt



Pin	CAN - M12 - 5 pins
	Description
1	Not connected
2	Not connected
3	CAN_GND
4	CAN_H
5	CAN_L



## User information

Product User Manual available on website, please read it before use.

## Products on request

Please contact our Design LAB on [www.crouzet.com](http://www.crouzet.com). Examples: special shaft - board adaptation...

### Warning:

The product information contained in this catalogue is given purely as information and does not constitute a representation, warranty or any form of contractual commitment. Crouzet Automatismes SAS and its subsidiaries reserve the right to modify their products without notice. It is imperative that we should be consulted over any particular use or application of our products and it is the responsibility of the buyer to establish, particularly through all the appropriate tests, that the product is suitable for the use or application. Under no circumstances will our warranty apply, nor shall we be held responsible for any application (such as any modification, addition, deletion, use in conjunction with other electrical or electronic components, circuits or assemblies, or any other unsuitable material or substance) which has not been expressly agreed by us prior to the sale of our products.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Sensor Cables / Actuator Cables](#) category:*

*Click to view products by [Crouzet](#) manufacturer:*

Other Similar products are found below :

[60963](#) [60964](#) [703000D02F2002](#) [703000D02F300](#) [703001D02F0602](#) [703001D02F1201](#) [703001D02F300](#) [704000D02F120](#) [773032K02F030](#)  
[802027107404-1](#) [802027213811-1](#) [804001A09M150](#) [805001A09M0502](#) [84914-0235](#) [84914-0237](#) [885030A09M020](#) [1200651332](#)  
[1200651713](#) [1200660844](#) [1200660845](#) [1200661173](#) [1200680071](#) [1200720053](#) [1200720081](#) [1200720099](#) [1200720217](#) [1200800231](#)  
[1200860125](#) [1200870123](#) [1200980102](#) [1200650267](#) [1200650298](#) [1200660183](#) [1200660782](#) [1200660849](#) [1200661295](#) [1200661297](#)  
[1200661342](#) [1200661343](#) [1200670080](#) [1200670220](#) [1200680331](#) [1200720252](#) [1200720255](#) [1200730184](#) [1200860344](#) [1200870359](#)  
[1200870643](#) [1200980008](#) [1200980031](#)