

# MOTORS & GEARMOTORS

# Overview



# ABOUT CROUZET

Crouzet is an independent company manufacturing mechatronic components for demanding applications in Aerospace & Transportation, Energy, Building and Machinery Industry.

Crouzet provides Switches and Sensors, Electromechanical Actuators, Electrical Protection Equipment, Cockpit Controls, Automation Controllers and Relays, and Instrumentation Services.

Since 1921, Crouzet has a heritage of close collaboration with customers in the development of products, from standard components to fully customized solutions.

Crouzet's customers and partners can rely on our teams worldwide to always meet and often exceed their expectations. Driven by innovation, our experts are focused on designing and delivering the right product for the right application.

Crouzet is your trusted partner of choice to face industrial challenges of today and tomorrow.

### WORLDWIDE PRESENCE



🕈 HEADQUARTERS 📃 SALES

SALES OFFICES

## **MOTORS**

	INDUSTRIAL BRUSH			DCmind BRUSH		DCmind BRUSHLESS		SYNCHRONOUS		STEPPER
	<b>C</b>					C	- min	Č.		· · · · · · · · · · · · · · · · · · ·
ហ្វេ CHARACTERISTICS	82840 82860	82800 10 50	82830 82890	89800 10 50	89830 89890	80140 180 280	80350 60 70	82510 20 30 40	82330 82340	82910 20 30 40
Nominal power (W)	0.9 / 3	9 → 33	27 <del>→</del> 95	15 → 35	54 <del>→</del> 104	66 → 150	310 → 600	0.3 → 3	0.2/0.4	0.5 → 5
Voltage	12 → 24 V	12 → 48 V	12 → 48 V	12 → 48 V	12 → 120 V	9 → 75 V	9 → 75 V	$\begin{array}{c} 24 \rightarrow 240 \ V \\ 50 \rightarrow 60 \ Hz \end{array}$	$24 \rightarrow 240 V_{\sim}$ 50 \rightarrow 60 Hz	3 → 64 V
Front side (mm)	Ø 32	Ø 42	Ø 63	Ø 42	Ø 63	SQ57	SQ75	Ø 35 / 51 Ø 57 / 65	Ø 47	Ø 35 / 51 Ø 57 / 65
Nominal speed (rpm)	3700	3000	3000	3000	3000	3000	3000	250 → 600	600 → 720	0 → 1500
Nominal torque (mN.m)	2.2 / 7.7	41 → 100	170 / 270	50 → 110	180 / 290	125 → 550	830 → 1900	10 → 110	2.5 → 8	15 → 300
Noise level (dBA)	55	55	55	35	35	45	50	30	45	35
Service life (hrs)	2000	3000	5000	4000	5000	20000	20000	20000	10 M on / off	20000
Certification		c AL us (	E SROHS	c¶L <sup>®</sup> us (	E GROHS	CE	RoHS	c¶L <sup>®</sup> us (		
Gearboxes	<b>e</b>	<b>?</b>			000		<b>0</b> 0	e	•	<b>(†)</b>
Connection		Y	Y		3					Y
Standard				((p))	۲	((p))	•			

IP65\*

 $(\mathbb{M})$ 

Planetary

Lead

IP54

Parallel shafts

Silent

IP65\*, IP67\*

IP69\*

IP40

\* Except front face & shaft

Interchangeable brushes

Optional regenerative energy absorber

IP30

Encoder

Brake

	INTEGRATED			EXTERNAL		
	He -			<b>N</b>		
CHARACTERISTICS 및	TNi21	SMi21	SMi22	BDE 30	BDE 40	
Compatible models	SQ57		SQ75	SQ57		
Speed-torque	•	•	•	•	•	
Position (P/R)		4096	4096			
Programming		DCmind Soft & DCmind Soft + CANopen	DCmind Soft + CANopen	PWM or C	) → 10 V	
Communication bus		Optional CANopea	Standard CANopen			
Voltage	10 → 36 V	9 → 75 V	9 → 75 V	18 → 36 V	10 → 36 V	
Maximum current (A)	17	17	75	10	14	
Adaptations	Progr	ams: Custom fir	mware as per cu	ustomer specific	ations	



	PARALLEL SHAFTS	PLANETARY	WORM			
CHARACTERISTICS	11 models	7 models	2 models			
Torque (N.m)	0.5 → 6	0.8 → 120	10 → 20			
Power (W)	0.2 → 50	8 → 600	25 → 600			
Service life (Mr*)	$1 \rightarrow 10$	50	50			
Ratios	4→1036800	4 → 308	5 → 100			
Options	Stainless stell shafts, pulleys, pinions, special bearings, etc					

### **ACCESSORIES & OPTIONS**

((o)) EMC filter

Cable

0 0 0 0 0

IP20

Worm

Ball bearing

 $\bigcirc$ 

Terminal

Connector

- Brakes from 0.25 to 4.5 N.m<sup>(1)</sup>
- > Encoders from 1 to 1000 Pulses per Revolution<sup>(2)</sup>
- Special connectors

Options

IP

- Special output shafts (design and/or material)
- > Others : on demand
- (1) Except Industrial Brush Ø32, Synchronous and Stepper ranges <sup>(2)</sup> Industrial Brush and DCmind Brush ranges only

## **ADAPTED PRODUCTS**

To meet your expectations, Crouzet offers you custom products matching your requirements, in the following areas:

 Control electronics Motor characteristics Gearboxes

IP40

CROUZET.COM



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## **CONTROL ELECTRONICS**

## **GEARBOXES**

\* Million revolutions





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### 90+ years of customization, adaptation & co-design expertise at your service

To meet market expectations and provide customers with the right solutions within the shortest timeframes, Crouzet has structured all company processes around the different types of product: standard products, adapted products or products specially developed for a customer. Introducing the adaptation wheel...

### SPECIAL PRODUCTS

When the adaptation is no longer suitable, we focus our design, manufacturing and qualification expertise on developing a new product designed to meet your requirements.

### STANDARD PRODUCTS

We offer a full range of motors and geared motors, including AC synchronous, brush and brushless DC and stepper motors. Our products are available immediately so you can quickly implement your projects.

### ADAPTED PRODUCTS

All projects are different, so we adapt the performance and functionality of each product to your requirements, ensuring the success of your most complex applications.



All our standard products can be complemented by factory-installed extras, accessories or programs including connectors, special contacts, software etc., to assist integration into your equipment, simplify your logistics and maximize the reliability of your installations.

## ACTUAL EXAMPLES

Brushless motor with integrated electronics for Access Control in public transportation applications:

 Autonomous torque, speed and position control

integrated emergency mode

> Specific firmware with

- Reinforced gearbox
- CANopen communication
- High resistance against vandalism
- Gear pump equipped with a brushless motor:
- Notor with leak tight seal
- > Application-specific electronics
- > Shortened motor

### Releasable linear actuator for gas boilers equipped with a stepper motor:

- > Gas flow adjustment
- > Automatic closing in the event of a power failure
- > Gas-tightness measured on the production line









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