

# MOTORS & **GEARMOTORS**

Overview



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## ABOUT CROUZET

# 100 YEARS MANUFACTURING THE FUTURE Jogether

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

Crouzet provides Switches & Sensors, Electromechanical Actuators, Electrical Control & Protection Equipment, Flight Control Equipment, Automation Controllers & 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 the industrial challenges of today and tomorrow.

### **WORLDWIDE PRESENCE**

## 10 Manufacturing Plants & 6 R&D Labs







ALENCE, FRANCE



PARIS. FRANCE



ORLEANS, FRANCE





HUIZHOU, CHINA





NANTES, FRANCE



VOUVRY, SWITZERLAND



SABLANCA 1. MOROCCO CASABLANCA 2. MOROCCO



BANGALORE, INDIA

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## **MOTORS**

	INDUSTRIAL BRUSH			DCmind BRUSH		DCmind BRUSHLESS		SYNCHRONOUS		STEPPER
				1×	(*)	C.	The state of the s		au A	· · · · · · · · · · · · · · · · · · ·
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 → 95	15 → 35	54 <b>→</b> 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	$24 \rightarrow 240 \text{ V} \sim$ $50 \rightarrow 60 \text{ Hz}$	24 → 240 V ~ 50 → 60 Hz	3 → 64 V
Front side (mm)	Ø 32	Ø 42	Ø 63	Ø 42	Ø 63	SQ57	5Q75	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 E VROHS	c <b>%</b> us (	E MROHS	c <b>M</b> us (	C FROHS	CE	RoHS	c <b>AL</b> °us (	C FROHS	CE MROHS
Gearboxes	<b>4</b>	00	abilib)	de la jar	O <sub>O</sub> O	(C) abilish	00	4	1	#
Connection										
Standard		<b>S</b>		<b>((9))</b>	<b>*</b>	<b>(</b> (9))				
Options		<b>(19)</b>								
IP		IP20		IP	65*	IP54	IP65*, IP67* IP69*	IP40	IP30	IP40

\* Except front face & shaft



























## **CONTROL ELECTRONICS**

	INTEGRATED			EXTERNAL		
			Name -			
CHARACTERISTICS S	TNi21	SMi21	SMi22	BDE 30	BDE 40	
Compatible models	SQ	)57	5Q75	SQ	57	
Speed-torque	•	•	•	•	•	
Position (P/R)		4096	4096			
Programming		DCmind Soft & DCmind Soft + CANopen	DCmind Soft + CANopen	PWM or C	) → 10 V===	
Communication bus		Optional CANOPER	Standard CANOPER			
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	Progra	ams: Custom fir	mware as per cı	ustomer specific	cations	

## **GEARBOXES**

	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 → 10	50	50			
Ratios	4 → 1036800	4 → 308	5 → 100			
Options	Stainless stell shafts, pulleys, pinions, special bearings, etc					

\* Million revolutions

## **ACCESSORIES & OPTIONS**

- > 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
- > 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 > EtherCAT.

> IP65, IP67, IP69

→ Gearboxes





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# 100+ 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...



## **ACTUAL EXAMPLES**

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

- Autonomous torque, speed and position control
- > Specific firmware with integrated emergency mode
- > Reinforced gearbox
- > CANopen communication
- High resistance against vandalism

#### Gear pump equipped with a brushless motor:

- > Rotor 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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