



**Brusatori**  
MOTORI ELETTRICI

Special applications

# Pitch Motors

Electrical Datasheet

## Pitch motor BR078304 – Electrical datasheet

Motor BR- without ventilation - 3000 rpm	078304		
Stall Torque <sup>1) 3)</sup>	Ton	Nm	34
Nominal Power <sup>1)</sup>	Pn	W	5718
Nominal Torque <sup>1)</sup>	Tn	Nm	27.3
Nominal speed	n	rpm	3000
Peak torque 20°C	Tpk	Nm	130
Current at nominal power <sup>1)</sup>	In	Arms	17
Stall current <sup>1) 3)</sup>	Ion	Arms	20.4
Peak current	Ipk	Arms	88
Inertia	Jm	kgcm <sup>2</sup>	46.4
Voltage constant at 20°C <sup>2)</sup>	ke	Vs/rad	1.04
Torque constant at 20°C and 0 rpm <sup>2)</sup>	kt	Nm/Arms	1.75
Derating Temp. Coeff. Of Back EMF	Dk/Dt	[%/°C]	-0.11
Winding Resistance at 20°C <sup>2)</sup>	Rc	Ohm	0.361
Winding Inductance <sup>2)</sup>	Lc	mH	2.94
bemf. at 1000 rpm a 20°C <sup>2)</sup>	V1000	V/krpm	108.86
Nominal voltage	Vn	Vrms	213
Weight	m	kg	48
Poles number	2p		8

Torque values refer to motor flanged suspended in horizontal positions (Aluminium flange dimensions 450x450x25 mm) minimum PWM 8kHz

DC bus voltage 590 Vdc

<sup>1)</sup> Continuous service S1 (dT=105°C)

<sup>2)</sup> Tolerance +/- 10%

<sup>3)</sup> Referred to 100rpm

## Pitch motor BR088204 – Electrical datasheet

Motor BR- without ventilation - 2000 rpm	088204		
Stall Torque <sup>1) 3)</sup>	Ton	Nm	105
Nominal Power <sup>1)</sup>	Pn	W	19849
Nominal Torque <sup>1)</sup>	Tn	Nm	95
Nominal speed	n	rpm	2000
Peak torque 20°C	Tpk	Nm	277
Current at nominal power <sup>1)</sup>	In	Arms	42.3
Stall current <sup>1) 3)</sup>	Ion	Arms	46.7
Peak current	Ipk	Arms	129
Inertia	Jm	kgcm <sup>2</sup>	16.9
Voltage constant at 20°C <sup>2)</sup>	ke	Vs/rad	1.37
Torque constant at 20°C and 0 rpm <sup>2)</sup>	kt	Nm/Arms	2.25
Derating Temp. Coeff. Of Back EMF	Dk/Dt	[%/°C]	-0.11
Winding Resistance at 20°C <sup>2)</sup>	Rc	Ohm	0.155
Winding Inductance <sup>2)</sup>	Lc	mH	2.81
bemf. at 1000 rpm a 20°C <sup>2)</sup>	V1000	V/krpm	143
Nominal voltage	Vn	Vrms	318
Weight	m	kg	70
Poles number	2p		8

Torque values refer to motor flanged suspended in horizontal position

DC bus voltage 590 Vdc, minimum PWM 8kHz

<sup>1)</sup> Continuous service S1 (dT=105°C)

<sup>2)</sup> Tolerance +/- 10%

<sup>3)</sup> Referred to 100rpm

## Pitch motor BRV96204 – Electrical datasheet

Motor BR- air forced ventilation - 2000 rpm	V96204		
Stall Torque <sup>1) 3)</sup>	Ton	Nm	440
Nominal Power <sup>1)</sup>	Pn	W	56549
Nominal Torque <sup>1)</sup>	Tn	Nm	270
Nominal speed	n	rpm	2000
Peak torque 20°C	Tpk	Nm	750
Current at nominal power <sup>1)</sup>	In	Arms	104.5
Stall current <sup>1) 3)</sup>	Ion	Arms	165
Peak current	Ipk	Arms	285
Inertia	Jm	kgcm <sup>2</sup>	718
Voltage constant at 20°C <sup>2)</sup>	ke	Vs/rad	1.75
Torque constant at 20°C and 0 rpm <sup>2)</sup>	kt	Nm/Arms	2.95
Derating Temp. Coeff. Of Back EMF	Dk/Dt	[%/°C]	-0.11
Winding Resistance at 20°C <sup>2)</sup>	Rc	Ohm	0.05
Winding Inductance <sup>2)</sup>	Lc	mH	1.8
bemf. at 1000 rpm a 20°C <sup>2)</sup>	V1000	V/krpm	184
Nominal voltage	Vn	Vrms	374
Weight	m	kg	235
Poles number	2p		8

Torque values refer to motor flanged suspended in horizontal positions (Steel flange dimensions 500x500x40 mm) minimum PWM 4kHz

DC bus voltage 590 Vdc

Converters scheduled for use must have the option of field weakening as a mandatory requirement.

<sup>1)</sup> Continuous service S1 (dT=105°C)

<sup>2)</sup> Tolerance +/- 10%

<sup>3)</sup> Referred to 100rpm