Specifications





① Discontinued

servo motor BMI 1-phase untapped IP65 single turn -131072 p/t - brake

BMI0702T21F

Discontinued on: Oct 9, 2023

Product availability: Non-Stock - Not normally stocked in distribution facility

Main

Range Compatibility	Lexium 32i
Product Or Component Type	Servo motor with power stage
Device Short Name	BMI

Complementary

Complementaly	
Maximum Mechanical Speed	8000 rpm
[Us] Rated Supply Voltage	115230 V - 1510 %
Supply Voltage Limits	100240 V
Phase	Single phase
Supply Frequency	50/60 Hz - 55 %
Network Frequency Limits	47.563 Hz
Emc Filter	Integrated
Continuous Output Current	2.6 A 8 kHz
Output Current 3S Peak	10.5 A 230 V 1 s
Continuous Stall Current	2.6 A
Continuous Stall Torque	21.95 lbf.in (2.48 N.m) 115230 V single phase
Peak Stall Torque	58.41 lbf.in (6.6 N.m) 115 V single phase 58.41 lbf.in (6.6 N.m) 230 V single phase
Nominal Output Power	700 W 230 V single phase 400 W 115 V single phase
Nominal Torque	19.47 lbf.in (2.2 N.m) 115 V single phase 15.05 lbf.in (1.7 N.m) 230 V single phase
Nominal Speed	4000 rpm 230 V single phase 1700 rpm 115 V single phase
Maximum Current Irms	17.7 A 230 V, single phase 17.7 A 115 V, single phase
Product Compatibility	Drive control unit LXM32i CANopen Drive control unit LXM32i EtherCAT
Shaft End	Untapped
Second Shaft	Without second shaft end
Shaft Diameter	0.43 in (11 mm)
Shaft Length	0.91 in (23 mm)

Price is "List Price" and may be subject to a trade discount - check with your local distributor or retailer for actual price.

Feedback TypeAbsolute single turn SinCos HiperfaceSpeed Feedback Resolution131072 points/turnHolding BrakeWithHolding Torque26.55 lbf.in (3 N.m) holding brakeMounting SupportInternational standard flangeMotor Flange Size2.76 in (70 mm)Electrical ConnectionPrinted circuit board connectorTorque Constant0.63 N.m/A 68 °F (20 °C)Back Emf Constant42.1 V/krpm 68 °F (20 °C)Number Of Motor Poles10Rotor Inertia1.24 kg.cm²Stator Resistance2.7 Ohm 68 °F (20 °C)Stator Inductance7.8 mH 68 °F (20 °C)Stator Liectrical Time Constant2.89 ms 68 °F (20 °C)Maximum Radial Force Fr710 N 1000 rpm 560 N 2000 rpm 460 N 3000 rpm 450 N 4000 rpm		
Holding BrakeWithHolding Torque26.55 lbf.in (3 N.m) holding brakeMounting SupportInternational standard flangeMotor Flange Size2.76 in (70 mm)Electrical ConnectionPrinted circuit board connectorTorque Constant0.63 N.m/A 68 *F (20 °C)Back Emf Constant42.1 V/krpm 68 *F (20 °C)Number Of Motor Poles10Rotor Inertia1.24 kg.cm²Stator Resistance2.7 Ohm 68 *F (20 °C)Stator Electrical Time Constant2.89 ms 68 *F (20 °C)Stator Electrical Time Constant2.89 ms 68 *F (20 °C)Maximum Radial Force Fr710 N 1000 rpm 560 N 2000 rpm 450 N 3000 rpm 450 N 3000 rpm 450 N 3000 rpm 390 N 6000 rpmMaximum Axial Force Fa0.2 x FrBrake Pull-In Power5 WType Of CoolingNatural convectionLength1.20 in (306 mm)Number Of Motor Stacks2Centring Collar Diameter2.36 in (60 mm)Centring Collar Depth0.10 in (2.5 mm)Number Of Mounting Holes4Mounting Holes Diameter0.22 in (5.5 mm)Circle Diameter Of The Mounting2.95323 in (7582 mm)Holes Diameter0.22 in (5.5 mm)	Feedback Type	Absolute single turn SinCos Hiperface
Holding Torque26.55 lbf.in (3 N.m) holding brakeMounting SupportInternational standard flangeMotor Flange Size2.76 in (70 mm)Electrical ConnectionPrinted circuit board connectorTorque Constant0.63 N.m/A 68 °F (20 °C)Back Emf Constant42.1 V/krpm 68 °F (20 °C)Number Of Motor Poles10Rotor Inertia1.24 kg.cm³Stator Resistance2.7 Ohm 68 °F (20 °C)Stator Resistance2.7 Ohm 68 °F (20 °C)Stator Inductance7.8 mH 68 °F (20 °C)Stator Electrical Time Constant2.89 ms 68 °F (20 °C)Maximum Radial Force Fr710 N 1000 rpm 560 N 2000 rpm 450 N 4000 rpm 390 N 6000 rpm 390 N 6000 rpmMaximum Axial Force Fa0.2 x FrBrake Pull-In Power5 WType Of CoolingNatural convectionLength1.2.05 in (306 mm)Number Of Motor Stacks2Centring Collar Diameter2.36 in (60 mm)Centring Collar Diameter0.22 in (5.5 mm)Circle Diameter Of The Mounting2.953.23 in (7582 mm)Holes10.10 in (2.5 mm)	Speed Feedback Resolution	131072 points/turn
Mounting Support International standard flange Motor Flange Size 2.76 in (70 mm) Electrical Connection Printed circuit board connector Torque Constant 0.63 N.m/A 68 "F (20 °C) Back Emf Constant 42.1 V/krpm 68 "F (20 °C) Number Of Motor Poles 10 Rotor Inertia 1.24 kg.cm² Stator Resistance 2.7 Ohm 68 "F (20 °C) Stator Resistance 2.7 Ohm 68 "F (20 °C) Stator Inductance 7.8 mH 68 "F (20 °C) Stator Electrical Time Constant 2.89 ms 68 "F (20 °C) Maximum Radial Force Fr 710 N 1000 rpm 560 N 2000 rpm 490 N 3000 rpm 490 N 3000 rpm 390 N 6000 rpm Maximum Axial Force Fa 0.2 x Fr Brake Pull-In Power 5 W Type Of Cooling Natural convection Length 12.05 in (306 mm) Number Of Motor Stacks 2 Centring Collar Diameter 2.36 in (60 mm) Centring Collar Depth 0.10 in (2.5 mm) Number Of Mounting Holes 4 Mounting Holes Diameter 0.29 in (5.5 mm)	Holding Brake	With
Motor Flange Size 2.76 in (70 mm) Electrical Connection Printed circuit board connector Torque Constant 0.63 N.m/A 68 "F (20 °C) Back Emf Constant 42.1 V/krpm 68 "F (20 °C) Number Of Motor Poles 10 Rotor Inertia 1.24 kg.cm² Stator Resistance 2.7 Ohm 68 "F (20 °C) Stator Resistance 2.7 Ohm 68 "F (20 °C) Stator Inductance 7.8 mH 68 "F (20 °C) Stator Electrical Time Constant 2.89 ms 68 "F (20 °C) Maximum Radial Force Fr 710 N 1000 rpm 560 N 2000 rpm 490 N 3000 rpm 490 N 3000 rpm Maximum Axial Force Fa 0.2 x Fr Brake Pull-In Power 5 W Type Of Cooling Natural convection Length 12.05 in (306 mm) Number Of Motor Stacks 2 Centring Collar Diameter 2.36 in (60 mm) Number Of Mounting Holes 4 Mounting Holes Diameter 0.22 in (5.5 mm) Circle Diameter Of The Mounting 2.95323 in (7582 mm)	Holding Torque	26.55 lbf.in (3 N.m) holding brake
Electrical Connection Printed circuit board connector Torque Constant 0.63 N.m/A 68 °F (20 °C) Back Emf Constant 42.1 V/krpm 68 °F (20 °C) Number Of Motor Poles 10 Rotor Inertia 1.24 kg.cm² Stator Resistance 2.7 Ohm 68 °F (20 °C) Stator Resistance 7.8 mH 68 °F (20 °C) Stator Inductance 7.8 mH 68 °F (20 °C) Stator Electrical Time Constant 2.89 ms 68 °F (20 °C) Maximum Radial Force Fr 710 N 1000 rpm 560 N 2000 rpm 490 N 3000 rpm 490 N 3000 rpm 390 N 6000 rpm 490 N 4000 rpm 500 V Maximum Axial Force Fa 0.2 x Fr Brake Pull-In Power 5 W Type Of Cooling Natural convection Length 12.05 in (306 mm) Number Of Motor Stacks 2 Centring Collar Diameter 2.36 in (60 mm) Centring Collar Depth 0.10 in (2.5 mm) Number Of Mounti	Mounting Support	International standard flange
Torque Constant0.63 N.m/A 68 °F (20 °C)Back Emf Constant42.1 V/krpm 68 °F (20 °C)Number Of Motor Poles10Rotor Inertia1.24 kg.cm²Stator Resistance2.7 Ohm 68 °F (20 °C)Stator Resistance2.7 Ohm 68 °F (20 °C)Stator Electrical Time Constant2.89 ms 68 °F (20 °C)Maximum Radial Force Fr710 N 1000 rpm 560 N 2000 rpm 450 N 4000 rpm 390 N 6000 rpmMaximum Axial Force Fa0.2 x FrBrake Pull-In Power5 WType Of CoolingNatural convectionLength12.05 in (306 mm)Number Of Motor Stacks2Centring Collar Diameter2.36 in (60 mm)Number Of Mounting Holes4Mounting Holes Diameter0.22 in (5.5 mm)Circle Diameter Of The Mounting2.953.23 in (7582 mm)	Motor Flange Size	2.76 in (70 mm)
Back Emf Constant 42.1 V/krpm 68 °F (20 °C) Number Of Motor Poles 10 Rotor Inertia 1.24 kg.cm² Stator Resistance 2.7 Ohm 68 °F (20 °C) Stator Resistance 2.7 Ohm 68 °F (20 °C) Stator Electrical Time Constant 2.89 ms 68 °F (20 °C) Maximum Radial Force Fr 710 N 1000 rpm 560 N 2000 rpm 430 N 3000 rpm 430 N 3000 rpm Maximum Axial Force Fa 0.2 x Fr Brake Pull-In Power 5 W Type Of Cooling Natural convection Length 12.05 in (306 mm) Number Of Motor Stacks 2 Centring Collar Diameter 2.36 in (60 mm) Number Of Mounting Holes 4 Mounting Holes Diameter 0.22 in (5.5 mm) Circle Diameter Of The Mounting 2.95323 in (7582 mm)	Electrical Connection	Printed circuit board connector
Number Of Motor Poles 10 Rotor Inertia 1.24 kg.cm² Stator Resistance 2.7 Ohm 68 °F (20 °C) Stator Inductance 7.8 mH 68 °F (20 °C) Stator Electrical Time Constant 2.89 ms 68 °F (20 °C) Maximum Radial Force Fr 710 N 1000 rpm 560 N 2000 rpm 450 N 3000 rpm 450 N 3000 rpm Maximum Axial Force Fa 0.2 x Fr Brake Pull-In Power 5 W Type Of Cooling Natural convection Length 12.05 in (306 mm) Number Of Motor Stacks 2 Centring Collar Diameter 2.36 in (60 mm) Number Of Mounting Holes 4 Mounting Holes Diameter 0.22 in (5.5 mm) Circle Diameter Of The Mounting 2.953.23 in (7582 mm)	Torque Constant	0.63 N.m/A 68 °F (20 °C)
Rotor Inertia 1.24 kg.cm² Stator Resistance 2.7 Ohm 68 °F (20 °C) Stator Inductance 7.8 mH 68 °F (20 °C) Stator Electrical Time Constant 2.89 ms 68 °F (20 °C) Maximum Radial Force Fr 710 N 1000 rpm 560 N 2000 rpm 450 N 4000 rpm 450 N 4000 rpm 390 N 6000 rpm Maximum Axial Force Fa 0.2 x Fr Brake Pull-In Power 5 W Type Of Cooling Natural convection Length 12.05 in (306 mm) Number Of Motor Stacks 2 Centring Collar Diameter 2.36 in (60 mm) Number Of Mounting Holes 4 Mounting Holes Diameter 0.22 in (5.5 mm) Circle Diameter Of The Mounting 2.953.23 in (7582 mm)	Back Emf Constant	42.1 V/krpm 68 °F (20 °C)
Stator Resistance 2.7 Ohm 68 °F (20 °C) Stator Inductance 7.8 mH 68 °F (20 °C) Stator Electrical Time Constant 2.89 ms 68 °F (20 °C) Maximum Radial Force Fr 710 N 1000 rpm 560 N 2000 rpm 490 N 3000 rpm 450 N 4000 rpm 390 N 6000 rpm Maximum Axial Force Fa 0.2 x Fr Brake Pull-In Power 5 W Type Of Cooling Natural convection Length 12.05 in (306 mm) Number Of Motor Stacks 2 Centring Collar Diameter 2.36 in (60 mm) Number Of Mounting Holes 4 Mounting Holes Diameter 0.22 in (5.5 mm) Circle Diameter Of The Mounting 2.953.23 in (7582 mm) Circle Diameter Of The Mounting 2.953.23 in (7582 mm)	Number Of Motor Poles	10
Stator Inductance 7.8 mH 68 °F (20 °C) Stator Electrical Time Constant 2.89 ms 68 °F (20 °C) Maximum Radial Force Fr 710 N 1000 rpm 560 N 2000 rpm 490 N 3000 rpm 450 N 4000 rpm 390 N 6000 rpm Maximum Axial Force Fa 0.2 x Fr Brake Pull-In Power 5 W Type Of Cooling Natural convection Length 12.05 in (306 mm) Number Of Motor Stacks 2 Centring Collar Diameter 2.36 in (60 mm) Number Of Mounting Holes 4 Mounting Holes Diameter 0.22 in (5.5 mm) Circle Diameter Of The Mounting 2.953.23 in (7582 mm)	Rotor Inertia	1.24 kg.cm ²
Stator Electrical Time Constant 2.89 ms 68 °F (20 °C) Maximum Radial Force Fr 710 N 1000 rpm 560 N 2000 rpm 490 N 3000 rpm 490 N 3000 rpm 390 N 6000 rpm Maximum Axial Force Fa 0.2 x Fr Brake Pull-In Power 5 W Type Of Cooling Natural convection Length 12.05 in (306 mm) Number Of Motor Stacks 2 Centring Collar Diameter 2.36 in (60 mm) Number Of Mounting Holes 4 Mounting Holes Diameter 0.22 in (5.5 mm) Circle Diameter Of The Mounting 2.953.23 in (7582 mm)	Stator Resistance	2.7 Ohm 68 °F (20 °C)
Maximum Radial Force Fr710 N 1000 rpm 560 N 2000 rpm 490 N 3000 rpm 450 N 4000 rpm 390 N 6000 rpmMaximum Axial Force Fa0.2 x FrBrake Pull-In Power5 WType Of CoolingNatural convectionLength12.05 in (306 mm)Number Of Motor Stacks2Centring Collar Diameter2.36 in (60 mm)Centring Collar Depth0.10 in (2.5 mm)Number Of Mounting Holes4Mounting Holes Diameter0.22 in (5.5 mm)Circle Diameter Of The Mounting Holes2.953.23 in (7582 mm) Holes	Stator Inductance	7.8 mH 68 °F (20 °C)
S60 N 2000 rpm 490 N 3000 rpm 450 N 4000 rpm 390 N 6000 rpm 390 N 6000 rpmMaximum Axial Force Fa0.2 x FrBrake Pull-In Power5 WType Of CoolingNatural convectionLength12.05 in (306 mm)Number Of Motor Stacks2Centring Collar Diameter2.36 in (60 mm)Centring Collar Depth0.10 in (2.5 mm)Number Of Mounting Holes4Mounting Holes Diameter0.22 in (5.5 mm)Circle Diameter Of The Mounting Holes2.953.23 in (7582 mm)	Stator Electrical Time Constant	2.89 ms 68 °F (20 °C)
Brake Pull-In Power 5 W Type Of Cooling Natural convection Length 12.05 in (306 mm) Number Of Motor Stacks 2 Centring Collar Diameter 2.36 in (60 mm) Centring Collar Depth 0.10 in (2.5 mm) Number Of Mounting Holes 4 Mounting Holes Diameter 0.22 in (5.5 mm) Circle Diameter Of The Mounting 2.953.23 in (7582 mm)	Maximum Radial Force Fr	560 N 2000 rpm 490 N 3000 rpm 450 N 4000 rpm 410 N 5000 rpm
Type Of CoolingNatural convectionLength12.05 in (306 mm)Number Of Motor Stacks2Centring Collar Diameter2.36 in (60 mm)Centring Collar Depth0.10 in (2.5 mm)Number Of Mounting Holes4Mounting Holes Diameter0.22 in (5.5 mm)Circle Diameter Of The Mounting Holes2.953.23 in (7582 mm)	Maximum Axial Force Fa	0.2 x Fr
Length12.05 in (306 mm)Number Of Motor Stacks2Centring Collar Diameter2.36 in (60 mm)Centring Collar Depth0.10 in (2.5 mm)Number Of Mounting Holes4Mounting Holes Diameter0.22 in (5.5 mm)Circle Diameter Of The Mounting Holes2.953.23 in (7582 mm)	Brake Pull-In Power	5 W
Number Of Motor Stacks 2 Centring Collar Diameter 2.36 in (60 mm) Centring Collar Depth 0.10 in (2.5 mm) Number Of Mounting Holes 4 Mounting Holes Diameter 0.22 in (5.5 mm) Circle Diameter Of The Mounting 2.953.23 in (7582 mm)	Type Of Cooling	Natural convection
Centring Collar Diameter 2.36 in (60 mm) Centring Collar Depth 0.10 in (2.5 mm) Number Of Mounting Holes 4 Mounting Holes Diameter 0.22 in (5.5 mm) Circle Diameter Of The Mounting Holes 2.95323 in (7582 mm)	Length	12.05 in (306 mm)
Centring Collar Depth 0.10 in (2.5 mm) Number Of Mounting Holes 4 Mounting Holes Diameter 0.22 in (5.5 mm) Circle Diameter Of The Mounting Holes 2.953.23 in (7582 mm)	Number Of Motor Stacks	2
Number Of Mounting Holes 4 Mounting Holes Diameter 0.22 in (5.5 mm) Circle Diameter Of The Mounting Holes 2.953.23 in (7582 mm)	Centring Collar Diameter	2.36 in (60 mm)
Mounting Holes Diameter 0.22 in (5.5 mm) Circle Diameter Of The Mounting Holes 2.953.23 in (7582 mm)	Centring Collar Depth	0.10 in (2.5 mm)
Circle Diameter Of The Mounting 2.953.23 in (7582 mm) Holes	Number Of Mounting Holes	4
Holes	Mounting Holes Diameter	0.22 in (5.5 mm)
Distance Shaft Shoulder-Flange 0.10 in (2.5 mm)		2.953.23 in (7582 mm)
	Distance Shaft Shoulder-Flange	0.10 in (2.5 mm)

Environment

Ip Degree Of Protection

IP65

PCE

Ordering and shipping details

Category	US1PC5618287
Discount Schedule	PC56
Gtin	3606485376134
Returnability	No
Country Of Origin	DE

Packing Units

Unit Type Of Package 1

Number Of Units In Package 1	1
Package 1 Height	10.24 in (26.0 cm)
Package 1 Width	7.87 in (20.0 cm)
Package 1 Length	23.23 in (59.0 cm)
Package 1 Weight	11.90 lb(US) (5.4 kg)

Contractual warranty

Warranty

18 months

Sustainability Screen

Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

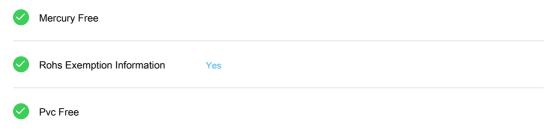
Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

Well-being performance



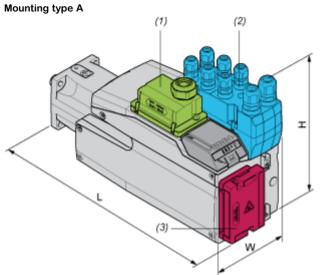
Certifications & Standards

Reach Regulation	REACh Declaration	
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)	
China Rohs Regulation	China RoHS declaration	
Environmental Disclosure	Product Environmental Profile	
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.	
Circularity Profile	End of Life Information	
California Proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth	

Dimensions Drawings

External Dimensions

With Standard Braking Resistor



- (1) Module for supply voltage
- (2) I/O module
- (3) Standard braking resistor

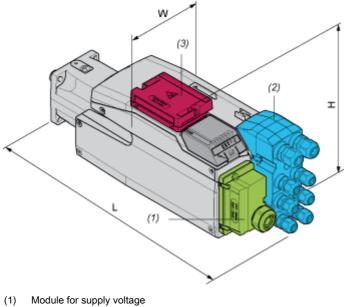
Dimensions in mm

W	Н	L
99	187	327

Dimensions in in.

W	Н	L
3,90	7,36	12,87

Mounting type B



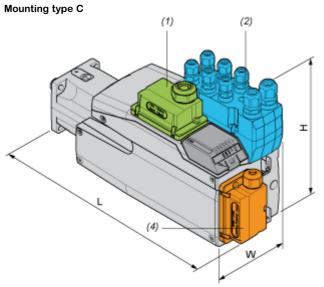
(2) I/O module

(3) Standard braking resistor

Dimensions in mm		
W	Н	L
99	138,5	376

Dimensions in in.			
W	Н	L	
3,90	5,45	14,8	

With External Braking Resistor



(1) Module for supply voltage

- (2) I/O module
- (4) External braking resistor

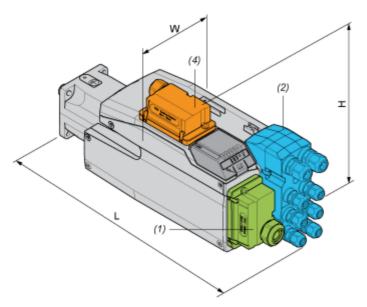
Dimensions in mm

W	Н	L
99	187	339

Dimensions in in.

W	Н	L
3,90	7,36	13,35

Mounting type D



- (1) Module for supply voltage
- (2) I/O module
- (4) External braking resistor

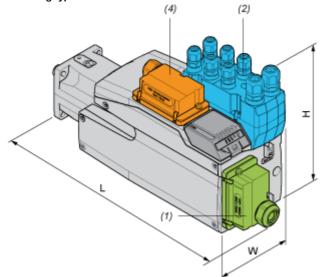
Dimer	nsions	in	mm	

W	Н	L
99	160	376

Dimensions in in.

W	H L				
3,90	6,3	14,8			

Mounting type E



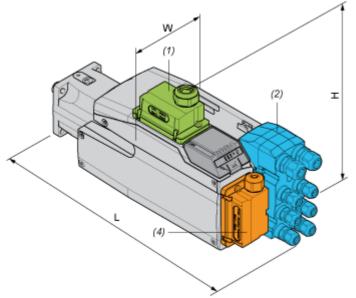
- (1) Module for supply voltage
- (2) I/O module
- (4) External braking resistor

Dimensions in mm

W	Н	L
99	187	366

Dimensions in in.					
W H L					
3,90	7,36	14,41			

Mounting type F



- (1) Module for supply voltage
- (2) I/O module
- (4) External braking resistor

Dimensions in mm

W	Н	L	
99	180	376	

Dimensions in in.

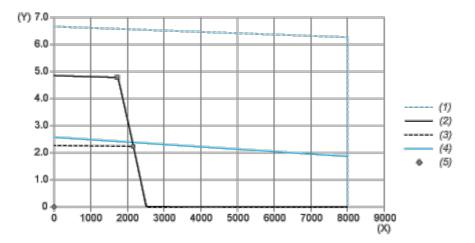
W	Н	L
3,90	7,09	14,8

BMI0702T21F

Performance Curves

Performance Curves

Torque/Speed Curves with 115 V Single Phase Supply Voltage

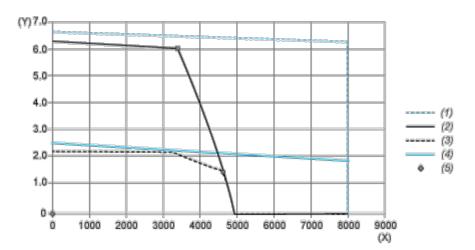


- (X) Speed (rpm)
- (Y) Torque (N.m)
- (1) Motor peak
- (2) Drive peak
- (3) Drive cont
- (4) Motor cont
- (5) Operating point

		Power	At Speed	With Torque
max. Peak Power		860 W	1760 rpm	4.67 N.m
max Cont. Power (Drive)	•	499 W	2160 rpm	2.21 N.m

Performance Curves

Torque/Speed Curves with 230 V Single Phase Supply Voltage



- (X) Speed (rpm)
- (Y) Torque (N.m)
- (1) Motor peak
- (2) Drive peak
- (3) Drive cont
- (4) Motor cont
- (5) Operating point

		Power	At Speed	With Torque
max. Peak Power		2129 W	3360 rpm	6.05 N.m
max Cont. Power (Drive)	•	736 W	4640 rpm	1.51 N.m