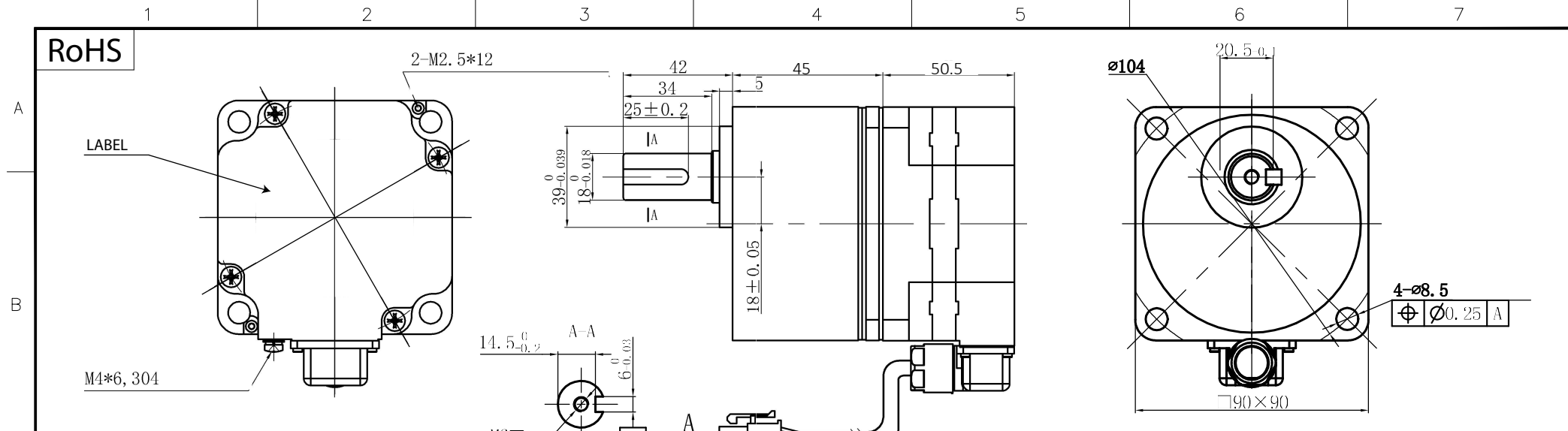


RoHS



GEARBOX SPECIFICATIONS

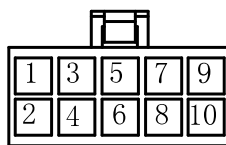
REDUCTION RATIO	1:5
EFFICIENCY	81%
RATED TORQUE	1.55~32 Nm
NOISE	60dB(A)

MOTOR SPECIFICATIONS

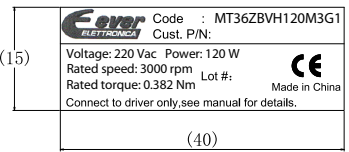
RATED VOLTAGE	220 Vac
POLES	x
PHASES	3
RATED CURRENT	1.2 A
PEAK CURRENT	--- A
RATED POWER	120 W
RATED TORQUE	0.382 Nm
PEAK TORQUE	--- Nm
RATED SPEED	3000 rpm ±10%
NO LOAD SPEED	4000 rpm ±10%
INSULATION CLASS	Class B, 130°C
IP CODE	IP54
DIELECTRIC STRENGTH	1800 V/S
INSULATION RESISTANCE	>50Mohm
LINE TO LINE RESISTANCE	--- ohm ±10%
LINE TO LINE INDUCTANCE	--- mH ±20%
ROTOR INERTIA	--- kg.cm ²
BACK EMF	--- Vrms/Krpm
OPERATING TEMPERATURE	-10°C ~ +40°C
STORAGE TEMPERATURE	-20°C ~ +70°C
WEIGHT	--- g. approx

WIRING DIAGRAM

1	2	3	4	5	6	7	8	9	10
Blue	Yellow	Yellow	Green	Green	Blue			Red	Black
W	H ₁₁	U	H _v	V	H _w			V _{cc} +5V	GND



LABEL



YYWWXXXX (25 x 8)
Stator barcode label

UNIT: mm
UNLESS OTHERWISE SPECIFIED TOLERANCES
DIMENSIONS : ±0.3 mm DEGREES : ±5%
ORTHOGRAPHIC PROJECTION

DESIGN	Stm02538-00
CHECK	
APPROVED	
DATE	07 / 09 / 2022

DRAWING NOT TO SCALE

REV	00 - First release.

MT36ZBVH120M3G1
DC BRUSHLESS MOTOR SPECIFICATION



Main specifications

PHASES

3

MODEL AVAILABLES:

Code	Power	Voltage	Gear Ratios
MT24ZBVH030M3Gx	30 W	230 Vac	5, 10, 15, 20, 30, 50, 100, 200
MT28ZBVH060M3Gx	60 W		5, 10, 15, 20, 30, 50, 100, 200
MT31ZBVH060M3Gx	60 W		5, 10, 15, 20, 30, 50, 100, 200
MT31ZBVH120M3Gx	120 W		5, 10, 15, 20, 30, 50, 100, 200
MT36ZBVH120M3Gx	120 W		5, 10, 15, 20, 30, 50, 100, 200
MT36ZBVH200M3Gx	200 W		5, 10, 15, 20, 30, 50, 100, 200
MT43ZBVH200M3Gx	200 W		5, 10, 15, 20, 30, 50, 100, 200
MT43ZBVH400M3Gx	400 W		5, 10, 15, 20, 30, 50, 100, 200
MT47ZBVH750M3Gx	750 W		5, 10, 15, 20, 30, 50

STATIC TORQUE

approximately 50% of nominal torque

NOMINAL SPEED

80 to 4000 rpm $\pm 0.2\%$ depending on gear ratio

ENVIRONMENTAL CONDITIONS

- environmental temperature -20°C to +40°C
- environmental humidity less than 85%
- temperature rise 50°C Max.

PROTECTION CLASS

IP54

INSULATION CLASS

B 130°C

INSULATION STRENGTH

1000M Ω Min., 500Vac 1 minute

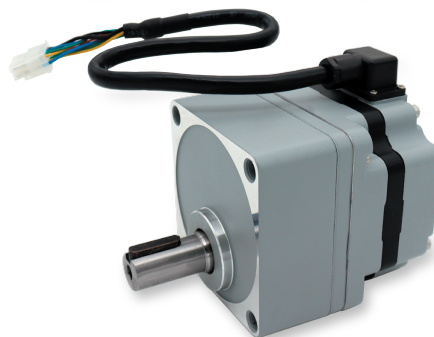
SHAFT LOADS

Power	Max axial load
30 W	40 N
60 W	100 N
120 W	
200 W	200 N
400 W	300 N or 400 N depending on gearbox
750 W	800 N

radial loads at 20 mm from the front flange from 110 N to 1400 N depending on gearbox in use

High Voltage and High Efficiency Brushless DC motors with gearboxes

ideal for high-dynamic
applications in compact size



MTxxZB

High Efficiency BLDC 230 Vac Motors

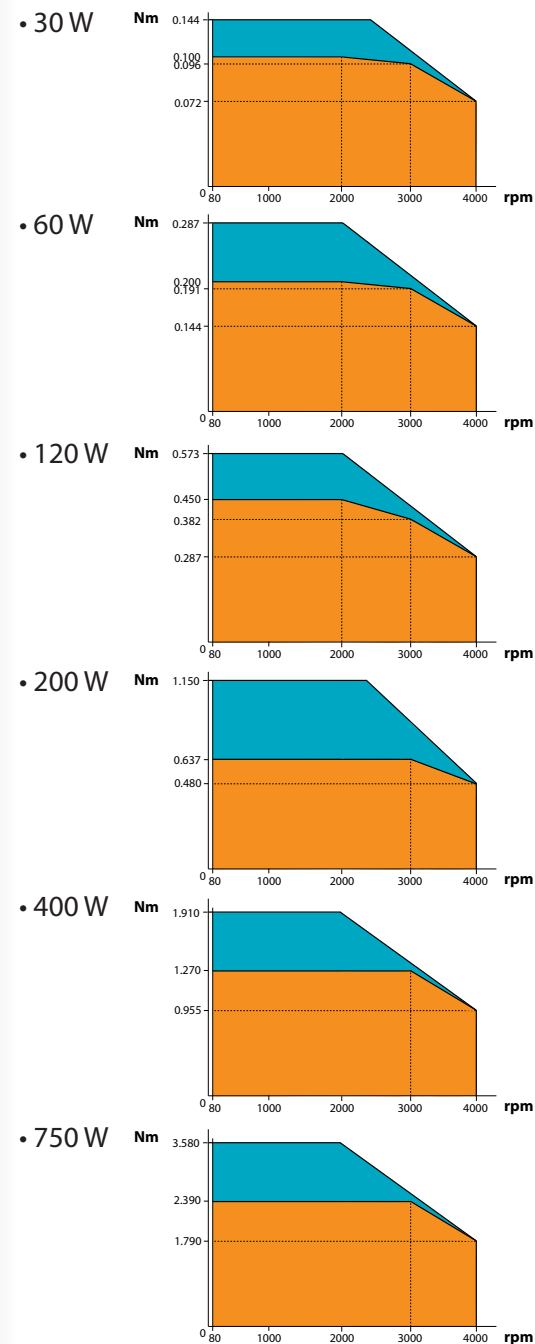
- High Torque/Size Ratio
- Advanced Structural Solutions:
 - ✓ high voltage windings
 - ✓ high IP54 protection against dust and water
 - ✓ top-grade magnetic materials
 - ✓ bearings resistant to high radial and axial loads
- Main Motors Features:
 - ✓ power consumption reduced
 - ✓ low-vibration and low-resonance rotors
 - ✓ spray plastic shell for strong corrosion resistance

Ever
ELETTRONICA
the clever drive

ELETTRONICA PER AUTOMAZIONE INDUSTRIALE
Via del Commercio, 2/4 -9/11
Loc. S. Grato - Z.I.
26900 - LODI (LO) - Italy
Tel. 0039 0371 412318 - Fax 0039 0371 412367
email infoever@everelettronica.it
www.everelettronica.it

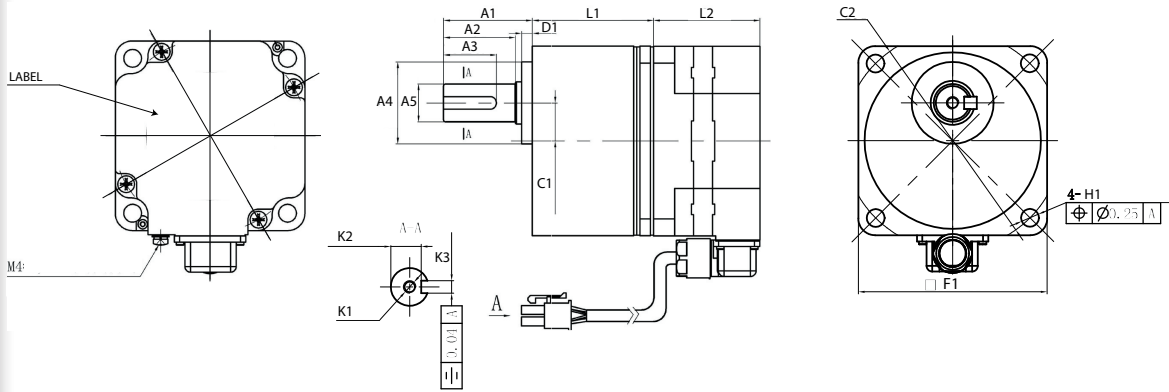
Torque features

Continuous working area
Area of use only for short periods and for acceleration



Mechanical Data

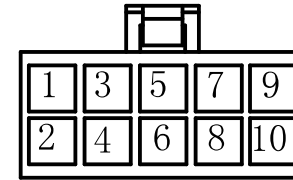
All dimensions are in mm



Type	F1	H1	C1	C2	L1*	L2	D1	A1	A2	A3	A4	A5	K1	K2	K3
MT24ZBVH030M3Gx	60	Ø5.5	10	Ø70±0.5	34/38/43	38.5	4	32	28	25	Ø23 0/-0.033	Ø10 0/-0.015 h7	---	7.5 +0.1/0	4 0/-0.03
MT28ZBVH060M3Gx	70	Ø6.5	12	Ø82±0.5	41/46/51	44.5	5	32	27	25	Ø32 0/-0.039	Ø12 0/-0.018 h7	---	9.5 +0.1/0	4 0/-0.03
MT31ZBVH060M3Gx	80	Ø6.5	13	Ø94±0.5	41/46/51	50.5	6.5	35	27	25	Ø33 0/-0.039	Ø15 0/-0.018 h7	M5 ↓10	12 +0.1/0	5 0/-0.03
MT31ZBVH120M3Gx	80	Ø6.5	13	Ø94±0.5	41/46/51	54	6.5	35	27	25	Ø33 0/-0.039	Ø15 0/-0.018 h7	M5 ↓10	12 +0.1/0	5 0/-0.03
MT36ZBVH120M3Gx	90	Ø8.5	18	Ø104±0.5	45/58/64	50.5	5	42	34	25	Ø39 0/-0.039	Ø18 0/-0.018 h7	M6 ↓12	14.5+0.1/0	6 0/-0.03
MT36ZBVH200M3Gx	90	Ø8.5	18	Ø104±0.5	45/58/64	54	5	42	34	25	Ø39 0/-0.039	Ø18 0/-0.018 h7	M6 ↓12	14.5+0.1/0	6 0/-0.03
MT43ZBVH200M3Gx	111	Ø8.5	20	Ø120±0.5	60/72/86	61.5	6	50	35	32	Ø41 0/-0.039	Ø22 0/-0.021 h7	M6 ↓12	18.5+0.04/0	6 0.04/-0
MT43ZBVH400M3Gx	111	Ø8.5	20	Ø120±0.5	60/72	61.5	6	50	35	32	Ø41 0/-0.039	Ø22 0/-0.021 h7	M6 ↓12	18.5+0.04/0	6 0.04/-0
MT47ZBVH750M3Gx	120	Ø9 0 M8	22	Ø140±0.5	84	107.5	7	48	37	30	Ø50 0/-0.039	Ø22 0/-0.021 h7	M6 ↓15	18.5+0.04/0	6 0.04/-0

*Depth of gearbox in relation to reduction ratio and number of stages = 1 stage / 2 stages / 3 stages

Connection diagram

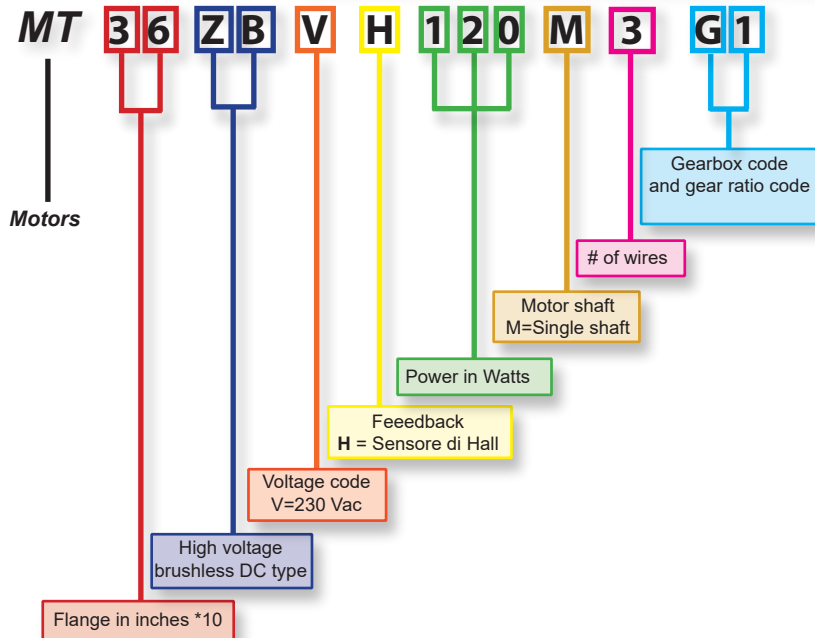


Connector: Molex 5557-10R

Cable length 300 mm

Connector pin	Wire colour	Function
1	Blue	W Motor phase
2	Yellow	U Hall sensor
3	Yellow	U Motor phase
4	Green	V Hall sensor
5	Green	V Motor phase
6	Blue	W Hall sensor
7	Not connected	---
8	Not connected	---
9	Red	5 Vdc power supply
10	Black	GND

Models and information available for MTxxxZB motors



Available option: on-board connector



Available option: cable output orientation:

