

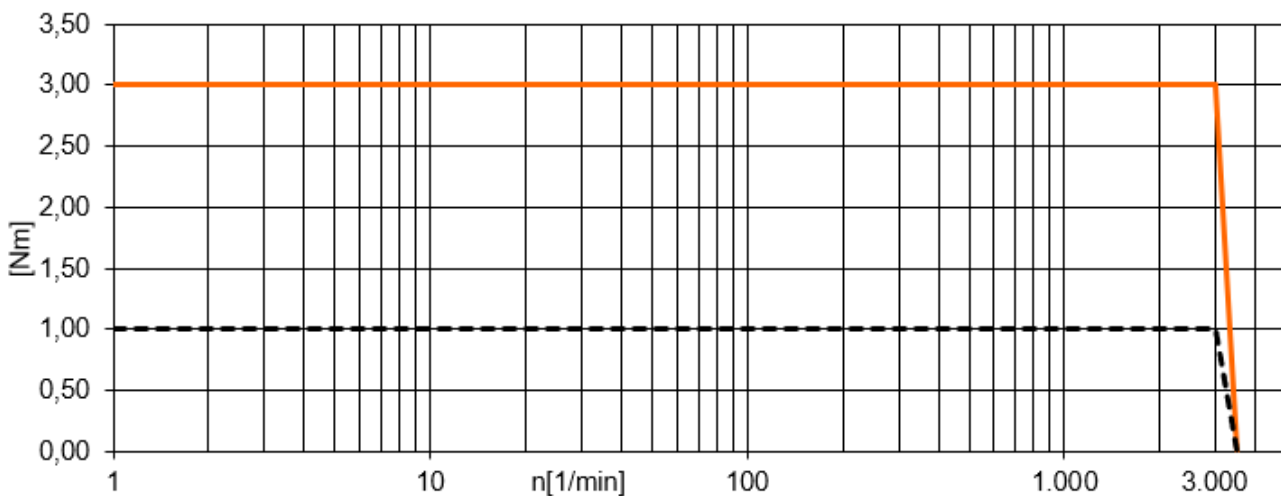
Technical data sheet EC Motor MOT-EC-86-C-H-A



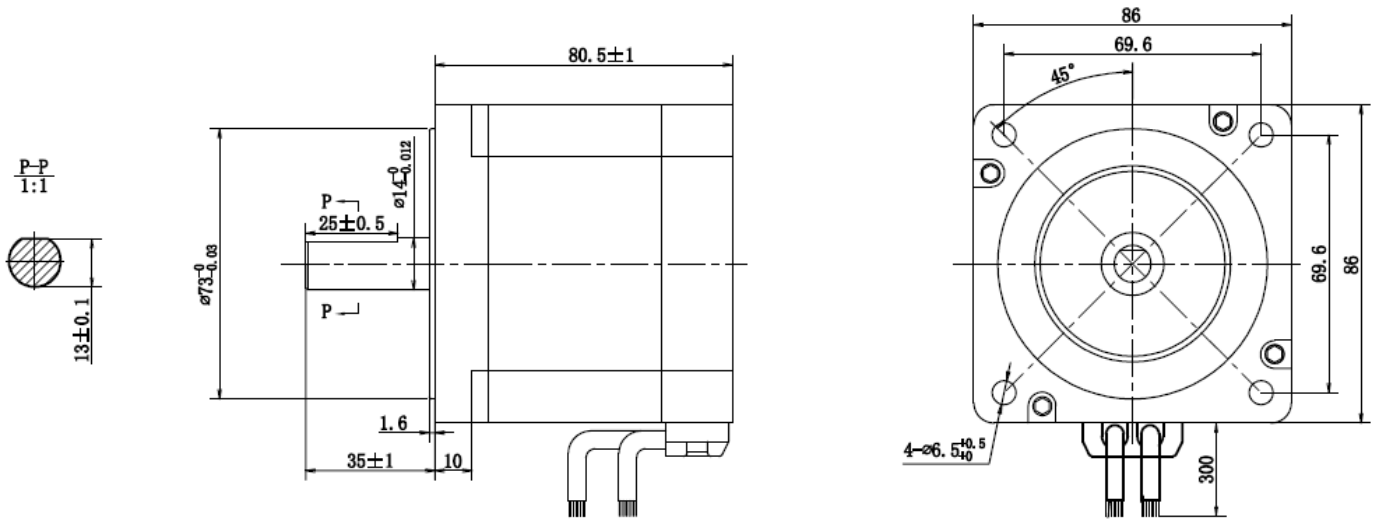
Technical data

Motor model	MOT-EC-86-C-H-A	
Number of phases	3	
Number of poles	8	
Nominal voltage	48	V DC
Rated speed	3000	RPM
Rated torque	1.0	Nm
Maximum torque	3.0	Nm
Nominal current	8.7	A
Peak current	26.1	A
Nominal power	314	W
Resistance	1.08	Ω
Inductivity	1.27	mH
Torque constant	0.115	Nm/A
Voltage constant	11	V/krpm
Weight	2.3	kg
Rotor inertia	6.5	kg/cm ²
Ambient temperature	-10 ... +50	$^{\circ}\text{C}$
Max. allowable temperature increase	+80	$^{\circ}\text{C}$
Insulation class	B	class
Air humidity (non-condensing)	85	%
IP rating - motor housing	40	IP
CE conformity	EMV	
Shaft load, axial	60	N
Shaft load, radial (20 mm)	220	N

Characteristic curve



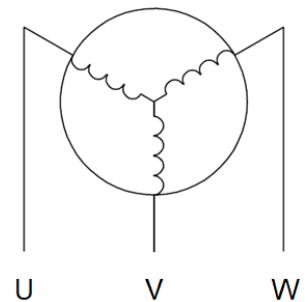
Dimensions



You can find CAD data at www.igus.eu/CAD

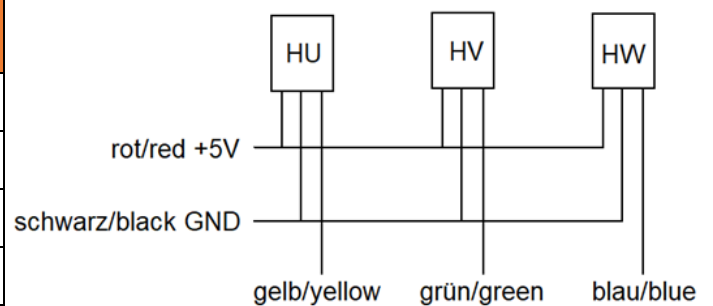
Connection - Motor

Motor winding	Cable colour	Cross section
U	yellow	0.75 mm ²
V	green	0.75 mm ²
W	blue	0.75 mm ²



Connection – Hall sensor

Hall connection	Cable colour	Cross section
+5 VDC	red	0.125 mm ²
GND	black	0.125 mm ²
HU	yellow	0.125 mm ²
HV	green	0.125 mm ²
HW	blue	0.125 mm ²



dryve D1 motor control system

- Multifold automation tasks without programming by simple parameterization. No software installation or app needed
Use by PC, tablet or smart phone
- For single axes, linear, flat and room linear robots and delta robots and rotary drives
- Stepper (ST), DC and EC motors with up to 21A peak currents and 48V
- Inputs/outputs, analogue inputs, CANopen, ModbusTCP for connection to master control systems such as Siemens or Beckhoff



Further information on the control system can be found at:



Motor control
www.igus.eu/dryve

Linear systems with motor



https://www.igus.eu/info/linear_system-product_finder

Accessories

Motor flanges



Couplings



Motor connection cables



Limit and reference switches



You can find further accessories at <https://www.igus.eu/info/drylin-e-accessories>