

A wide range of AC motors with both synchronous permanent magnet versions and asynchronous single-phase or three -phase versions.

Synchronous motors rotate at a fixed and precise speed, independent of variations in load and supply voltage.

Asynchronous motors are characterised by a speed of rotation that is dependent on the load applied to the shaft. The unloaded speed is proportional to the frequency of the single or three phase supply (230/400V-50Hz).

AC motors are often used for applications where the speed and operating torque are fixed and are directly powered by mains voltage. They are designed to have a long working life, necessary for many applications.

The following information is given as a guide to choosing an AC motor:

Type

Permanent magnet synchronous motor

- double wound stator
- multi-polar magnet and radial magnetisation rotor
- bi-directional rotation via the use of an internal de-phasing capacitor

Squirrel cage asynchronous motor

- multi-recessed triple-wound stator
- squirrel cage rotor
- single-phase or three-phase versions

Life expectancy

- Depends on usage, principally limited by life expectancy of the bearings.

Overheating

Synchronous motors

- convection cooling, motor can block rotor without risk of deterioration
- isolation quality class B.

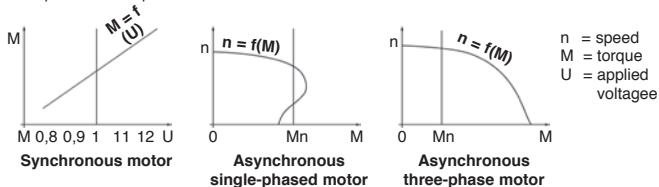
Squirrel cage asynchronous motors

- incorporated ventilator cooling
- isolation quality class E.

Technical information

Characteristics

The performance of AC motors is shown by the graphs given below which are given as a guide only as actual performance will depend on temperature, stability of the supply voltage and frequency and of the circuit capacitance.



Electronics

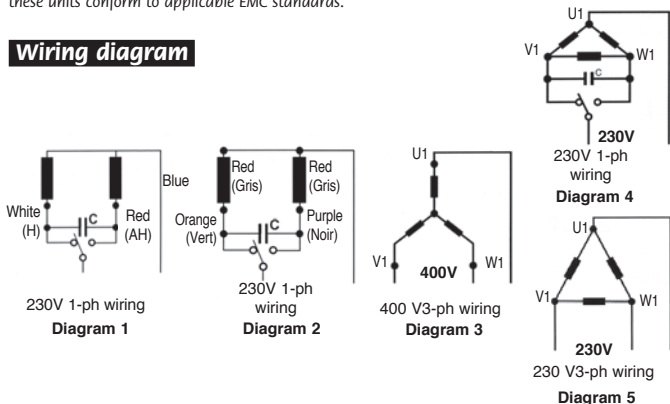
These speed controllers operate by varying the frequency of the power supply to an asynchronous three-phase motor.

In order to maintain a constant torque, the ratio of the supply voltage and frequency ratio is kept constant. As output voltage remains constant above 50Hz, the torque will drop as the speed rises. To avoid reducing the efficiency, motors should not be run at a frequency higher than 150Hz.

When connected to a motor with internal ventilation, it is also recommended to avoid working permanently at supply frequencies lower than 20 Hz. This is because as the fan is not turning as fast, the motor may overheat and be damaged or destroyed.

Variable frequency drives can produce electrical interference. To protect sensitive equipment nearby these units conform to applicable EMC standards.

Wiring diagram



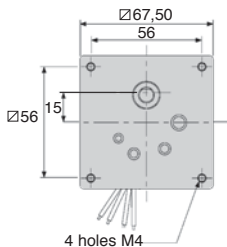
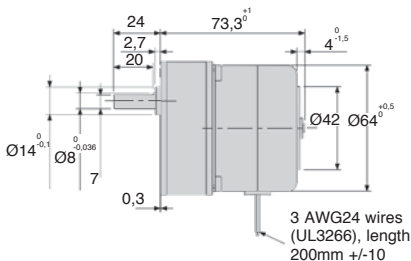
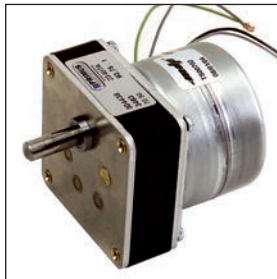
LINK64

Torque from 1.3Nm to 6Nm

- 230 V AC Single phase
- Rotor: permanent magnet
- Magnet: ferrite
- Type of gearbox: spur gear
- Bearings: self-lubricating bushes
- Max. axial load: 30N
- Axial backlash: 0.3mm
- Max. radial load: 60N at 10mm from the surface
- Press fit force: 30N
- Working temp. from 0°C to +40°C
- Weight: 830g

Assembly

- Capacitor supplied
- Refer to Diagram N° 2 on technical information



DISCOUNTS

Qty	1+	6+	10+
Disc. List	-7%	On request	On request

Part number	Reduction ratio	Number of stages	Efficiency (%)	Unloaded speed (rpm)	Loaded speed (rpm)	Nominal torque (Nm)	Nominal current (mA)	Price each 1 to 5
LINK6443A/0012	12:1	2	85	31,0	31,0	1,3	180	217,29 €
LINK6443A/0037	37,5:1	3	78	10,0	10,0	3,8	180	220,29 €
LINK6443A/0050	50:1	3	78	8,0	8,0	5,1	180	220,29 €
LINK6443A/0093	93,75:1	4	72	4,0	4,0	6,0	180	241,11 €
LINK6443A/0187	187:1	4	72	2,0	2,0	6,0	180	241,11 €
LINK6443A/0375	375:1	5	66	1,0	1,0	6,0	180	264,94 €
LINK6443A/0750	750:1	5	66	0,5	0,5	6,0	180	264,94 €

Dimensions in mm



Asynchronous AC motor 0.09kW

Torque up to 0.64Nm

CHT56

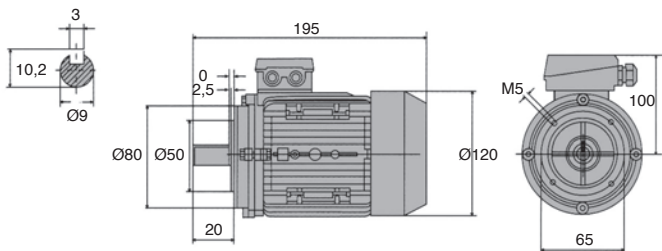
- 3 phase AC asynchronous motor
- 4 pole motor
- Supply frequency 50 Hz
- B14 mounting flange
- Insulation class F
- Protection IP55
- Bearings: ball bearings
- Can rotate in both directions
- Rotor: Squirrel cage

Accessories

- Servo amplifier TEL-ATV11/180
- Gearbox CHM

Option

- Motor with B5 mounting flange



DISCOUNTS

Qty	1+	6+	10+
Disc. List	-7%	On request	

Part number	Power (kW)	Power supply (V)	Current at 400V (A)	Torque (Nm)	Efficiency	Power factor cos	Weight (kg)	Price each 1 to 5
CHT56B4-B14	0,09	230/400	0,43	0,64	50%	0,61	3,2	92,55 €

Dimensions in mm

Asynchronous **AC** motor 0.12 to 0.22kW

CHT63

Torque up to 1.77Nm

- 3 phase AC asynchronous motor
- 4 pole motor
- Supply frequency 50 Hz
- B14 mounting flange
- Insulation class F
- Ingress protection: IP55
- Bearings: ball bearings
- Can rotate in both directions
- Rotor: Squirrel cage

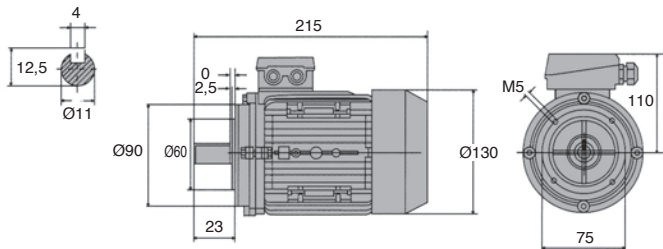


Accessories

- Servo amplifier **TEL-ATV11/180, TEL-ATV11/370**
- Gearbox **CHM**

Option

- Motor with B5 mounting flange



DISCOUNTS

Qty	1+	6+	10+
Disc.	List	-7%	On request

Part number	Power (kW)	Power supply (V)	Current at 400V (A)	Torque (Nm)	Efficiency	Power factor cos	Weight (kg)	Price each 1 to 5
CHT63A4-B14	0,12	230/400	0,47	0,86	57%	0,64	3,9	95,81 €
CHT63B4-B14	0,18	230/400	0,70	1,27	57%	0,65	4,5	100,44 €
CHT63C4-B14	0,22	230/400	0,92	1,77	59%	0,67	4,8	105,50 €

Dimensions in mm



Asynchronous AC Motor 0.18 to 0.55kW

Torque up to 3.81Nm

CHT71

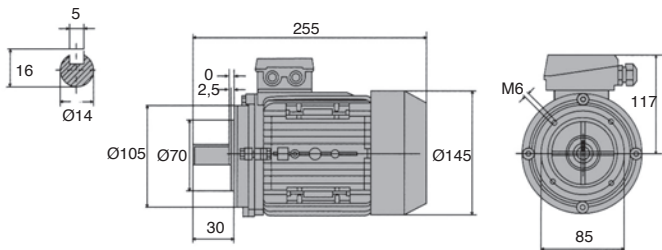
- 3 phase AC asynchronous motor
- 4 pole motor
- Supply frequency 50 Hz
- B14 mounting flange
- Insulation class F
- Ingress protection: IP55
- Bearings: ball bearings
- Can rotate in both directions
- Rotor: Squirrel cage

Accessories

- Servo amplifier TEL-ATV11/370
- Gearbox CHM

Option

- Motor with B5 mounting flange



DISCOUNTS

Qty	1+	6+	10+
Disc. List		-7%	On request

Part number	Power (kW)	Power supply (V)	Current at 400V (A)	Torque (Nm)	Efficiency	Power factor cos	Weight (kg)	Price each 1 to 5
CHT71A4-B14	0,25	230/400	0,84	1,77	60%	0,72	5,6	108,61 €
CHT71B4-B14	0,37	230/400	1,12	2,58	65%	0,74	6,2	121,00 €
CHT71C4-B14	0,55	230/400	1,61	3,81	66%	0,75	7,0	137,19 €

Dimensions in mm

Asynchronous AC Motor 0.55 to 1.1kW



CHT80

Torque up to 7.6Nm

- 3 phase AC asynchronous motor
- 4 pole motor
- Supply frequency 50 Hz
- B14 mounting flange
- Insulation class F
- Ingress protection: IP55
- Bearings: ball bearings
- Can rotate in both directions
- Rotor: Squirrel cage

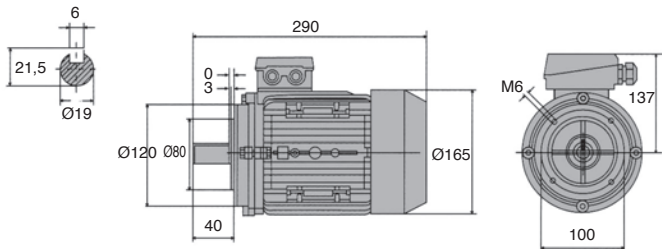


Accessories

- Gearbox **CHM**

Option

- Motor with B5 mounting flange



DISCOUNTS

Qty	1+	6+	10+
Disc.	List	-7%	On request

Part number	Power (kW)	Power supply (V)	Current at 400V (A)	Torque (Nm)	Efficiency	Power factor cos	Weight (kg)	Price each 1 to 5
CHT80A4-B14	0,55	230/400	1,59	3,81	67%	0,75	8,9	143.73 €
CHT80B4-B14	0,75	230/400	1,94	5,20	72%	0,78	10,0	212.90 €
CHT80C4-B14	1,10	230/400	2,64	7,58	78%	0,77	11,0	245.84 €

Dimensions in mm



Asynchronous AC Motor 1.1 to 1.85kW

Torque up to 9.24Nm

CHT90

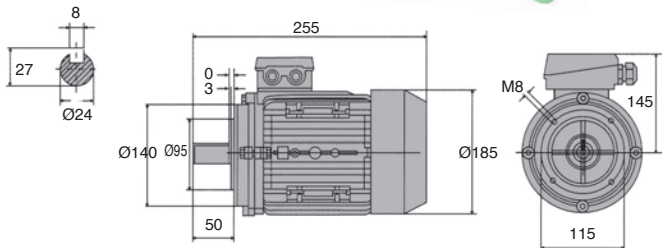
- 3 phase AC asynchronous motor
- 4 pole motor
- Supply frequency 50 Hz
- B14 mounting flange
- Insulation class F
- Ingress protection: IP55
- Bearings: ball bearings
- Can rotate in both directions
- Rotor: Squirrel cage

Accessories

- Gearbox CHM

Option

- Motor with B5 mounting flange



DISCOUNTS

Qty	1+	6+	10+
Disc. List	-7%	On request	

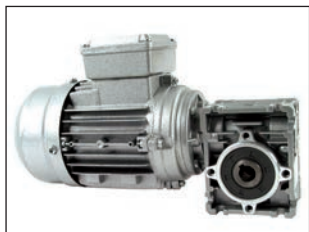
Part number	L (mm)	Power (kW)	Power supply (V)	Current at 400V (A)	Torque (Nm)	Efficiency	Power factor cos	Weight (kg)	Price each 1 to 5
CHT90S4-B14	310	1,10	230/400	2,64	5,19	76,2%	0,79	12,1	254,71 €
CHT90L4-B14	335	1,50	230/400	3,46	7,51	78,5%	0,80	14,3	295,26 €
CHT90LL4-B14	365	1,85	230/400	4,30	9,24	79%	0,78	16,0	On request

Dimensions in mm

CHM30 -MOT

Torque up to 22Nm

- **Three phase electric motor gearbox assembly**
- Comprises 1 **CHM30** gearbox and 1 **CHT** motor (see motor section)
- 4 pole motor
- B14 mounting flange
- Motor speed 1400 rpm
- Material:
Gearbox casing: aluminium

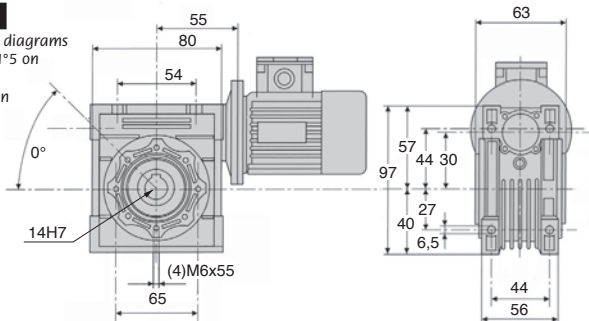


Accessories

- Servo amplifier **TEL-ATV11/180**, **TEL-ATV11/370**
- Output shaft **CHM30-X**, **CHM30-DX**
- Reaction arm **CHM30-BR**

Wiring

- See wiring diagrams N°3 and N°5 on technical information pages



DISCOUNTS

Qty	1+	6+	10+
Disc.	List	-7%	On request

Part number	Reduction ratio	Motor	Motor power (kW)	Loaded speed (rpm)	Nominal Torque (Nm)	Service factor	Price each 1 to 5
CHM30-7-63C4	7,5:1	63C4	0,22	186,7	9	2,1	216,41 €
CHM30-10-63C4	10:1	63C4	0,22	140,0	11	1,6	216,41 €
CHM30-15-63C4	15:1	63C4	0,22	93,3	16	1,0	215,92 €
CHM30-20-63C4	20:1	63C4	0,22	70,0	20	0,9	215,92 €
CHM30-25-63B4	25:1	63B4	0,18	56,0	20	1,0	211,33 €
CHM30-30-63B4	30:1	63B4	0,18	46,7	22	0,9	211,33 €
CHM30-40-63B4	40:1	63B4	0,18	35,0	21	0,8	211,33 €
CHM30-50-63B4	50:1	63B4	0,18	28,0	19	0,8	211,33 €
CHM30-60-56B4	60:1	56B4	0,09	23,3	18	0,9	203,44 €
CHM30-80-56B4	80:1	56B4	0,09	17,5	13	0,9	203,44 €

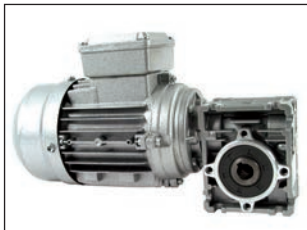
Dimensions in mm



Torque up to 52Nm

CHM40 -MOT

- Three phase electric motor gearbox assembly
- Comprises 1 CHM40 gearbox and 1 CHT motor (see motor section)
- 4 pole motor
- B14 mounting flange
- Motor speed 1400 rpm
- Material:
Gearbox casing: aluminium

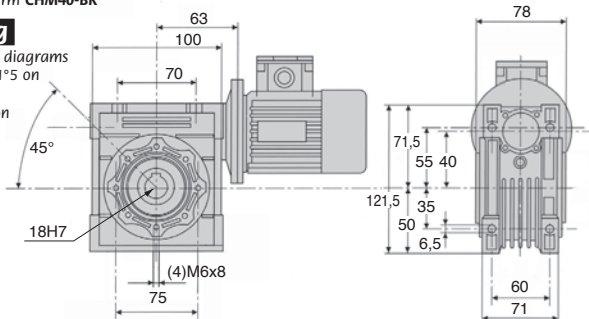


Accessories

- Servo amplifier TEL-ATV11/370
- Output shaft CHM40-X, CHM40-DX
- Reaction arm CHM40-BR

Cabling

- See wiring diagrams N°3 and N°5 on technical information pages



DISCOUNTS

Qty	1+	6+	10+
Disc.	List	-7%	On request

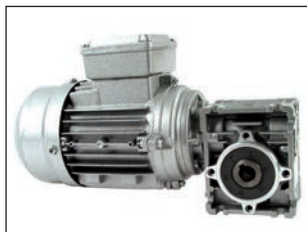
Part number	Reduction ratio	Motor	Motor power (kW)	Loaded speed (rpm)	Nominal Torque (Nm)	Service factor	Price each 1 to 5
CHM40-7-71C4	7,5:1	71C4	0,55	186,7	22	1,6	271,03 €
CHM40-10-71C4	10:1	71C4	0,55	140,0	30	1,4	271,03 €
CHM40-15-71C4	15:1	71C4	0,55	93,3	44	0,9	271,03 €
CHM40-20-71C4	20:1	71C4	0,55	70,0	38	1,0	271,03 €
CHM40-25-71B4	25:1	71B4	0,37	56,0	45	0,9	254,81 €
CHM40-30-71B4	30:1	71B4	0,37	46,7	52	0,8	254,81 €
CHM40-40-71A4	40:1	71A4	0,25	35,0	43	0,9	242,45 €
CHM40-50-63C4	50:1	63C4	0,22	28,0	44	0,9	239,32 €
CHM40-60-63B4	60:1	63B4	0,18	23,3	42	0,8	234,27 €
CHM40-80-63B4	80:1	63B4	0,18	17,5	36	0,8	234,27 €
CHM40-100-63B4	100:1	63B4	0,18	14,0	35	0,8	234,27 €

Dimensions in mm

CHM50 -MOT

Torque up to 87Nm

- **Three phase electric motor gearbox assembly**
- Comprises 1 **CHM50** gearbox and 1 **CHT** motor (see motor section)
- 4 pole motor
- B14 mounting flange
- Motor speed: 1400 rpm
- Material:
Gearbox casing: aluminium

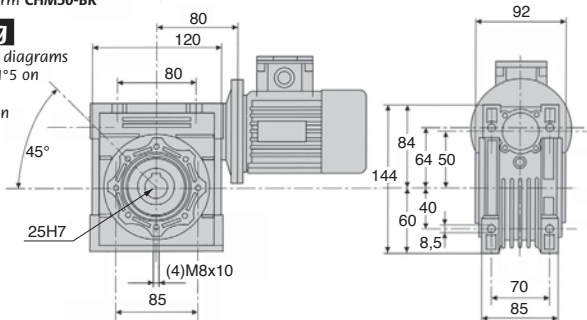


Accessories

- Servo amplifier **TEL-ATV11/370**
- Output shaft **CHM50-X, CHM50-DX**
- Reaction arm **CHM50-BR**

Cabling

- See wiring diagrams N°3 and N°5 on technical information pages



DISCOUNTS

Qty	1+	6+	10+
Disc.	List	-7%	On request

* without CHM50-100-63B4 mounting flange B5

Part number	Reduction ratio	Motor	Motor power (kW)	Loaded speed (rpm)	Nominal Torque (Nm)	Service factor	Price each 1 to 5
CHM50-7-80B4	7.5:1	80B4	0,75	186,7	33,3	2,0	330,73 €
CHM50-10-80B4	10:1	80B4	0,75	140,0	43,9	1,6	330,73 €
CHM50-15-80B4	15:1	80B4	0,75	93,3	62,6	1,2	330,73 €
CHM50-20-80B4	20:1	80B4	0,75	70,0	80,0	0,9	330,73 €
CHM50-25-80A4	25:1	80A4	0,55	56,0	70,0	1,0	316,26 €
CHM50-30-80A4	30:1	80A4	0,55	46,7	80,0	1,0	316,26 €
CHM50-40-71B4	40:1	71B4	0,37	35,0	67,0	1,1	293,51 €
CHM50-50-71B4	50:1	71B4	0,37	28,0	78,0	0,9	293,51 €
CHM50-60-71B4	60:1	71B4	0,37	23,3	87,0	0,8	293,51 €
CHM50-80-71A4	80:1	71A4	0,25	17,5	70,0	0,9	281,13 €
CHM50-100-63B4*	100:1	63B4	0,18	14,0	59,0	0,9	272,97 €

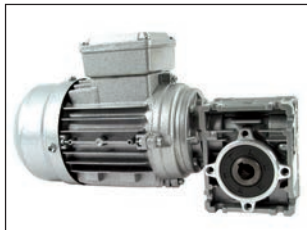
Dimensions in mm



Torque up to 165Nm

CHM63-MOT

- Three phase electric motor gearbox assembly
- Comprises 1 CHM63 gearbox and 1 CHT motor (see motor section)
- 4 pole motor
- B14 mounting flange
- Motor speed 1400 rpm
- Material:
Gearbox casing: aluminium

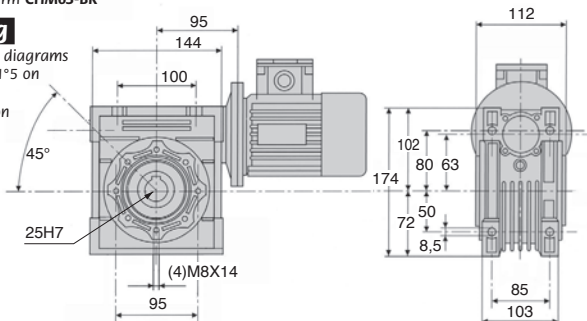


Accessories

- Servo amplifier TEL-ATV11/370
- Output shaft CHM63-X, CHM63-DX
- Reaction arm CHM63-BR

Cabling

- See wiring diagrams N°3 and N°5 on technical information pages



DISCOUNTS

Qty	1+	6+	10+
Disc.	List	-7%	On request

Part number	Reduction ratio	Motor	Motor power (kW)	Loaded speed (rpm)	Nominal Torque (Nm)	Service factor	Price each 1 to 5
CHM63-7-90L4	7,5:1	90L4	1,50	186,7	67,4	1,8	457,37 €
CHM63-10-90L4	10:1	90L4	1,50	140,0	88,6	1,4	457,37 €
CHM63-15-90L4	15:1	90L4	1,50	93,3	126,0	1,1	457,37 €
CHM63-20-90L4	20:1	90L4	1,50	70,0	164,0	0,8	457,37 €
CHM63-25-90S4	25:1	90S4	1,10	56,0	145,0	0,9	432,22 €
CHM63-30-90S4	30:1	90S4	1,10	46,7	165,0	1,0	432,22 €
CHM63-40-80B4	40:1	80B4	0,75	35,0	143,0	1,0	402,60 €
CHM63-50-80A4	50:1	80A4	0,55	28,0	122,0	1,1	388,15 €
CHM63-60-80A4	60:1	80A4	0,55	23,3	138,0	0,9	388,15 €
CHM63-80-71B4	80:1	71B4	0,37	17,5	114,0	1,1	365,40 €
CHM63-100-71B4	100:1	71B4	0,37	14,0	127,0	0,9	365,40 €

Dimensions in mm