

# HOYER

MOTORS

## Data sheet

**Item no. / Configuration** 01 / 3104315-0160-020201-S-A00804  
**Description** HMC3 315L1-4 400/690 V 50 Hz 160 kW

General data	
Standard series	IEC 60034
Type	HMC3 315L1-4
Design	400 VD / 690 VY 50 Hz + 480 VD / 830 VY 60 Hz
Direction of rotation	CW
Installation max. altitude (m)	1.000
Poles	4

Motor protection	
Winding temp. detector	No
Temp. detector type	None
Bearing detector	No
Winding PTC main	PTC 3 x 155°C
Winding PTC spare	None
Space heater	None
Terminal board thread	M16
Electrical insulation	Standard (1350 V @ 0.8 µs)
Tropical insulation	No
SPM	N/A
External grounding	Yes
Drain hole	Yes
Rain cap	No

Classification	
Class society	
Shaft requirement acc. to	None
Ex. code	No

Mechanical data	
Frame / Shaft height	IEC 315
Type of construction	B5
Cooling method	IC411
Protection class	IP55
Temp. insulation class	F
Frame material	Cast iron
Keyway	Closed
Balancing	Half key
IEC vibration class	A
Weight (kg)	1078
Bearing (DE)	6319 / C3 / DGBB
Bearing (NDE)	6319 / C3 / DGBB
Fixed bearing	DE
Moment of inertia (kg×m <sup>2</sup> )	3.628
Painting (color)	RAL 9005
Corrosion protection	C3L
Main terminal box pos.	DE top
Main cable entries	Blind cap 2xM63x1.5
Main cable direction	Right from DE
Main cable material	Plastic
Aux. cable entries	Blind cap 2xM20x1.5
Aux. cable direction	NDE
Aux. cable material	Plastic

Winding operation variants			
Rated power (kW)	160	160	
Frequency (Hz)	50	60	
Connection	D/Y	D/Y	
Voltage (V)	400 / 690	480 / 830	
Full load current (A)	264 / 152	221 / 128	
No load current (A)	69.5	69.5	
Speed (rpm)	1487	1785	
Power factor 100/75/50 (%)	0.91 / 0.89 / 0.83	0.91 / 0.89 / 0.83	
Efficiency 100/75/50 (%)	96.3 / 96.6 / 95.8	96.2 / 96.2 / 95.4	
Efficiency class	IE3	IE3	
Full load torque (Nm)	1027	856	
Tst/Tn	2.27	2.72	
Tmax/Tn	2.7	3.24	
Ist/In	7.83	9.37	
Temp. rise class	B	B	
Duty	S1	S1	
Sound pressure level (dBA)	76.8	82	
Min. ambient temp. (°C)	-20°C	-20°C	
Max. ambient temp. (°C)	40°C	40°C	

Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.