

**EBARA**



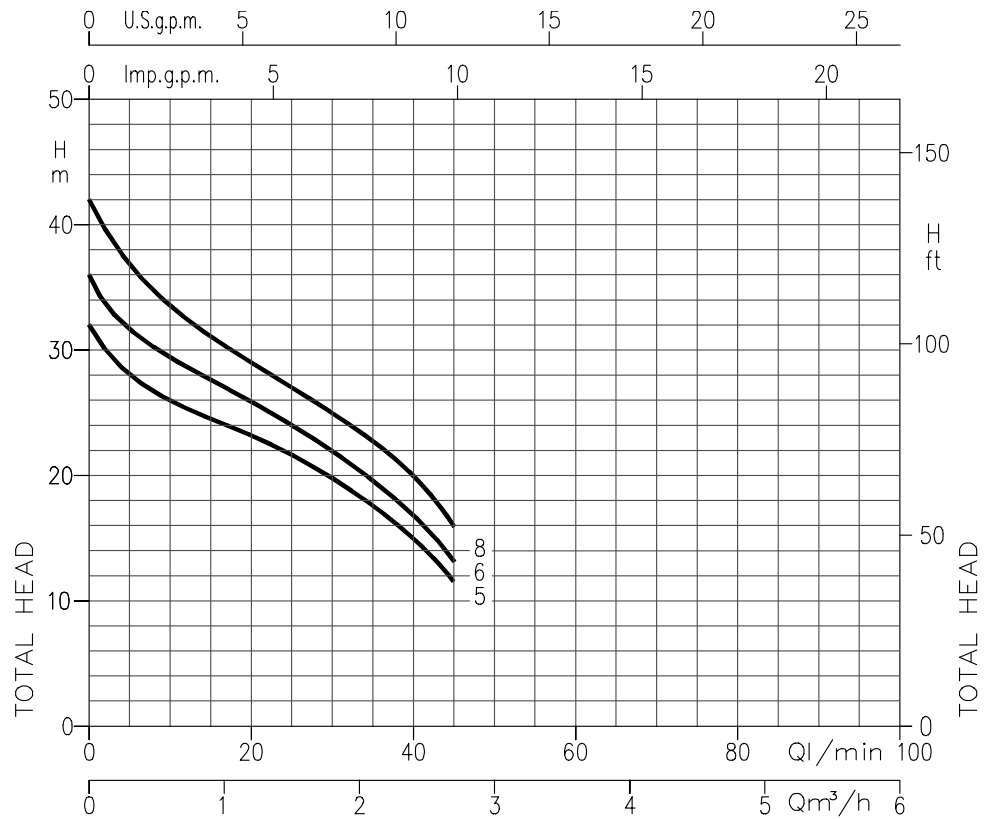
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<b>PUMP</b>		
Liquid Handled	Type of liquid	Clean water
	Max temperature	60
Maximum working pressure [MPa]		0.6
Construction	Impeller	Closed centrifugal type
	Shaft seal type	Mechanical seal
	Bearing	Sealed ball bearing
Pipe Connection	Suction [inch]	G 1
	Discharge [inch]	G 1
Material	Casing	AISI 304
	Impeller	Noryl <sup>®</sup>
	Casing cover	AISI 304
	Shaft seal	Ceramic/Carbon/NBR
	Shaft	AISI 303 (Wet extension)
	Bracket	AISI 304
	Ejector	Noryl <sup>®</sup>
	Diffuser	Noryl <sup>®</sup>
Applicable standard of test		ISO 9906 – Annex A

<b>MOTOR</b>		
Type	Electric - TEFC	
	Single Phase	Three Phase
No. of Poles	2	
Synchronous speed [min <sup>-1</sup> ]	3000	
Insulation Class	Class F	
IP Rating	IP 44	
	IP 55 (on request)	
Power rating	[kW]	0.37~0.6
	[HP]	0.5~0.8
Frequency [Hz]	50	
Voltage [V]	230 ±10%	230/400 ±10%
Capacitor	Built in	-
Over load protection	Built in	Provided by the user
Casing material	AISI 304	
Base material/motor support	AISI 304	
Dimensions of cable entry	PG11	

## SELECTION CHART

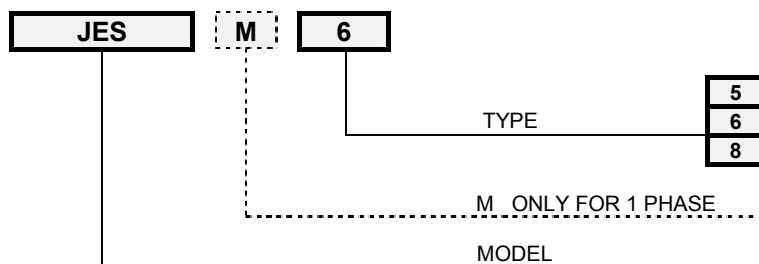
50Hz



Type pumps		kW	HP	Q=Capacity			
Single Phase 230 V 50 Hz	Three Phase 230/400 V 50 Hz			l/min 5	20	40	45
JESM 5	JES 5	0.37	0.5	28	23	15	11.5
JESM 6	JES 6	0.44	0.6	31.5	26	17	13.5
JESM 8	JES 8	0.6	0.8	37	29	20	16

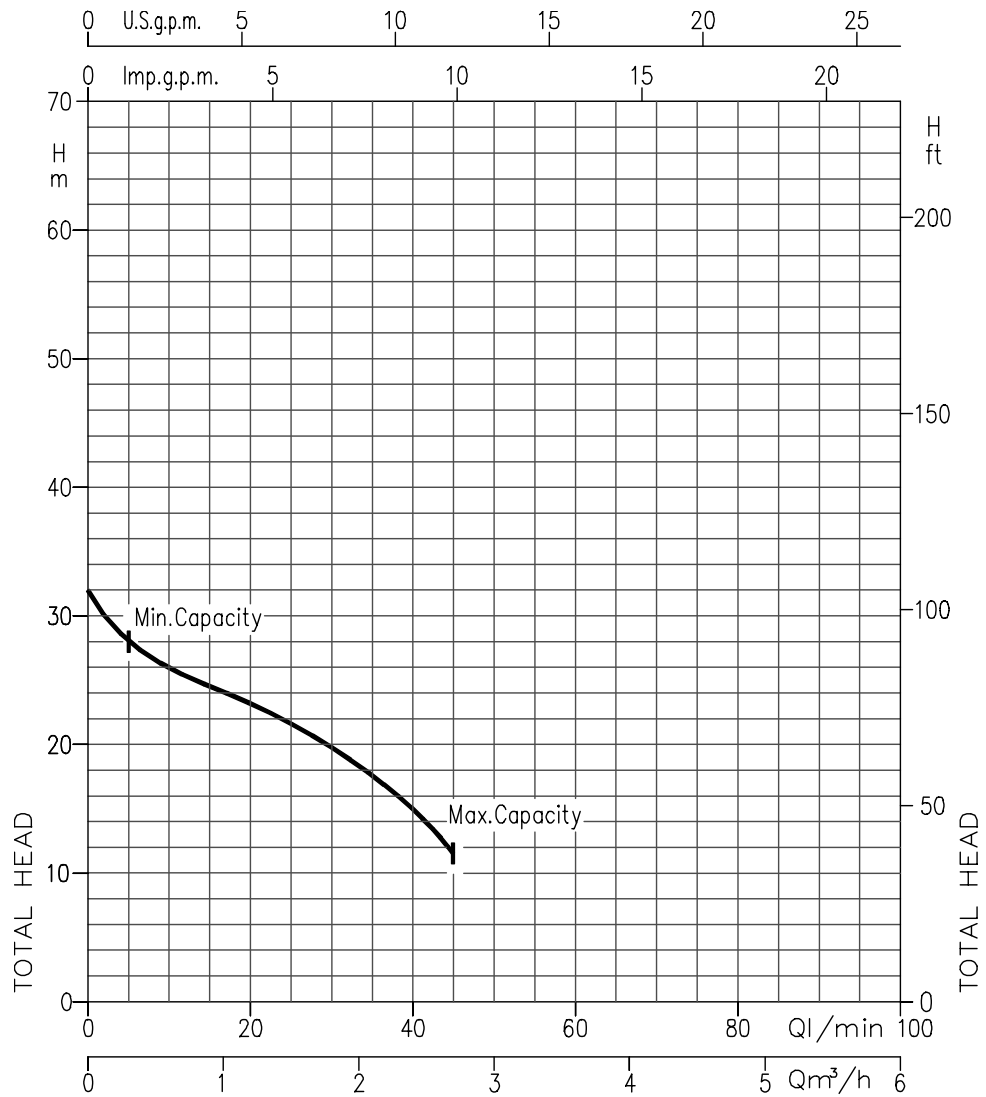
H=Total manometric head in meters

### TYPE KEY



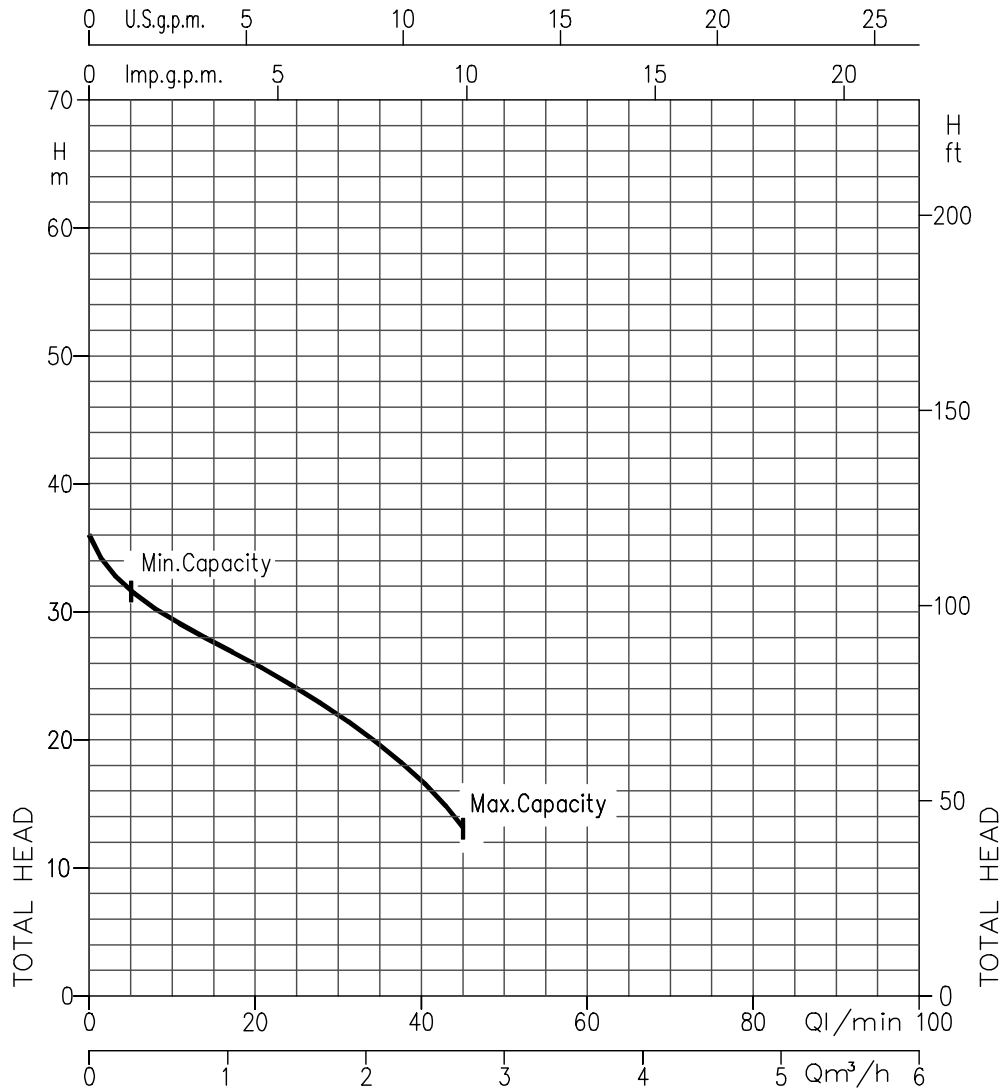
PUMP CHARACTERISTIC PERFORMANCE

JES 5 (0.37 kW) SYNCHRONOUS SPEED : 3000 min<sup>-1</sup>



Temperature of water: 20°C  
 Impeller diameter = 104 mm  
 Applicable standard of test: ISO 9906 – Annex A

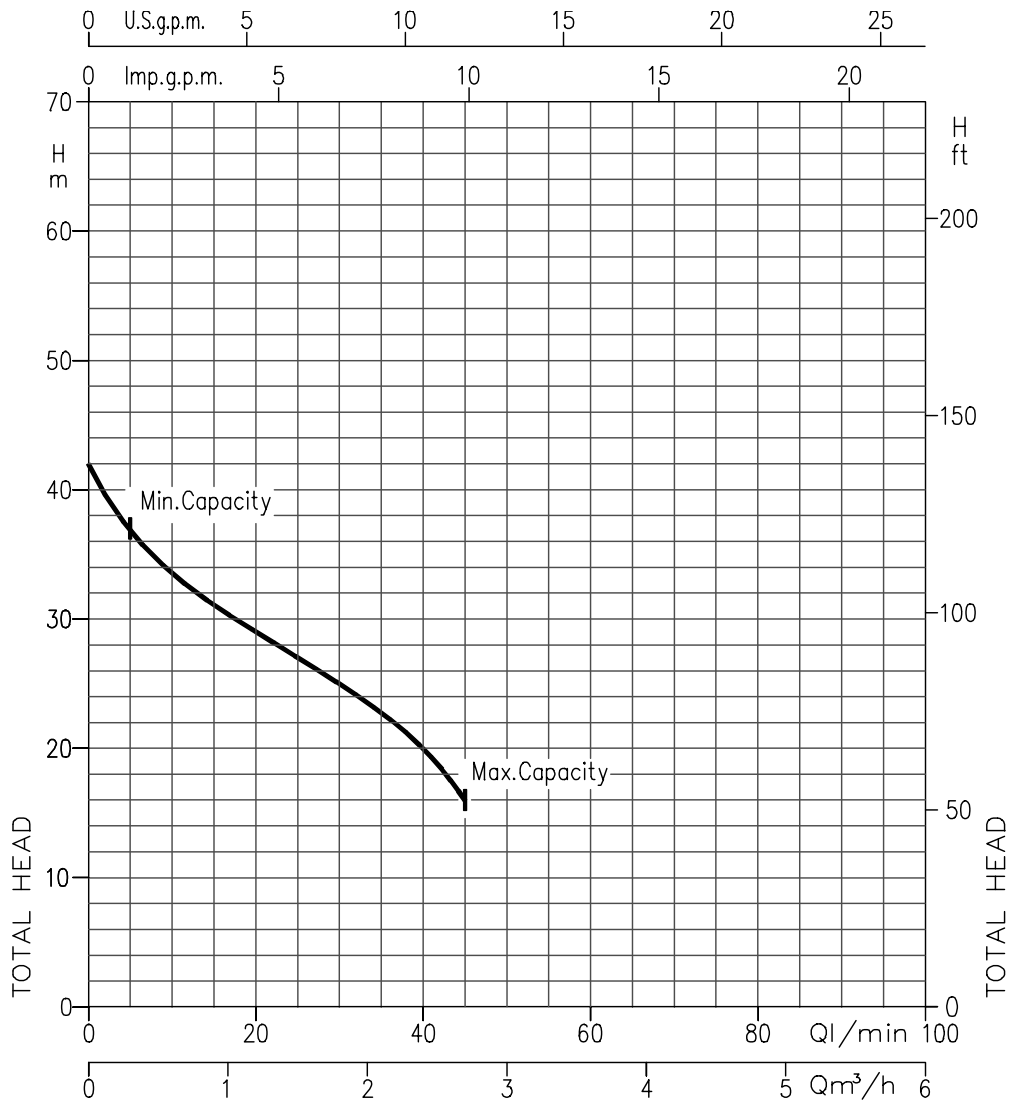
**PUMP CHARACTERISTIC PERFORMANCE**  
**JES 6 (0.44 kW) SYNCHRONOUS SPEED: 3000 min<sup>-1</sup>**



Temperature of water: 20°C  
 Impeller diameter = 104 mm  
 Applicable standard of test: ISO 9906 – Annex A

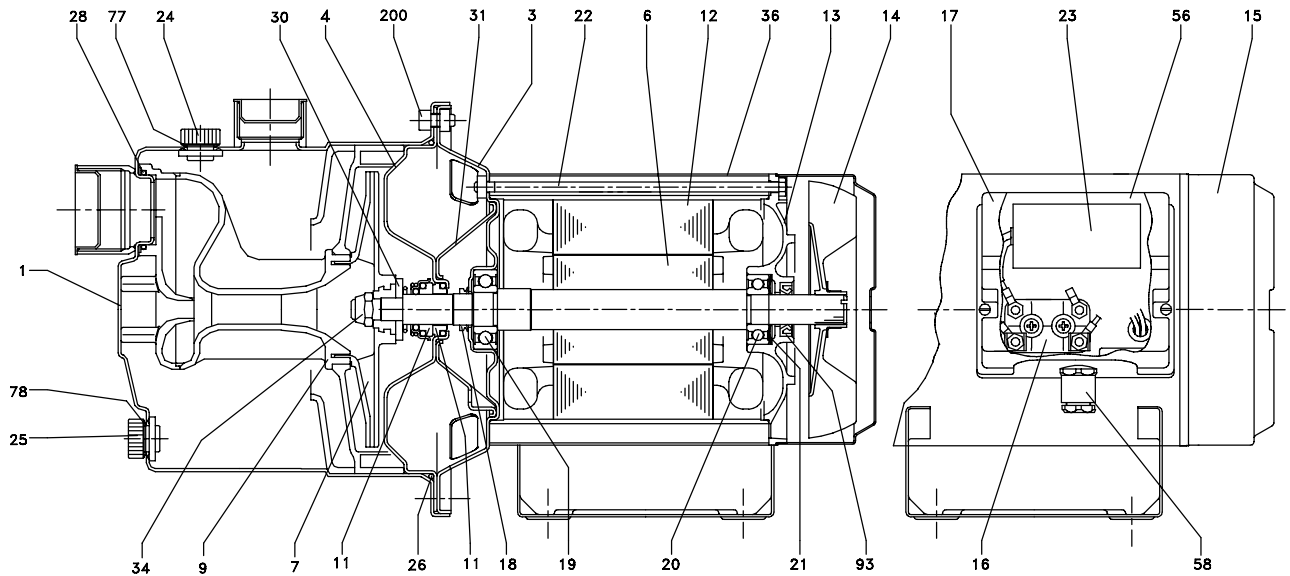
PUMP CHARACTERISTIC PERFORMANCE

JES 8 (0.6 kW) SYNCHRONOUS SPEED : 3000 min<sup>-1</sup>



Temperature of water: 20°C  
 Impeller diameter = 110 mm  
 Applicable standard of test: ISO 9906 – Annex A

SECTIONAL VIEW



N°	PART NAME	MATERIAL	NO.FOR 1 UNIT	N°	PART NAME	MATERIAL	NO.FOR 1 UNIT
1	Casing	AISI 304	1	23	Capacitor [1]	-	1
3	Motor bracket	AISI 304	1	24	Priming plug	Nylon	1
4	Casing cover	AISI 304	1	25	Drain plug	Nylon	1
6	Shaft with rotor	AISI 303 (Part in contact with liquid)	1	26	O-ring	NBR	1
7	Impeller	Noryl	1	28	O-ring	NBR	1
9	Diffuser Venturi tube	Noryl	1	30	Mechanical seal spacer	Brass	1
11	Mechanical seal	Carbon/Ceramic/NBR	1	31	Thrust flange	AISI 304	1
12	Motor frame with stator	-	1	34	Impeller nut (2)	AISI 304	1
13	Motor cover	Aluminium	1	36	External motor casing	AISI 304	1
14	Fan	Polypropilene	1	56	Box gasket	NBR	1
15	Fan cover	Fe P04 Zinked	1	58	Cable entry	-	1
16	Terminal box	-	1	77	O-ring	NBR	1
17	Terminal box cover [2]	Aluminium	1	78	O-ring	NBR	1
18	Splash ring	NBR	1	93	Lip seal [3]	-	1
19	Pump side ball bearing	-	1	200	Screw	Stainless steel A2 UNI7323	6
20	Fan side ball bearing	-	1	-	-	-	-
21	Adjusting ring	Steel C70	1	-	-	-	-
22	Tie rod	Fe 42 Zinked	4	-	-	-	-

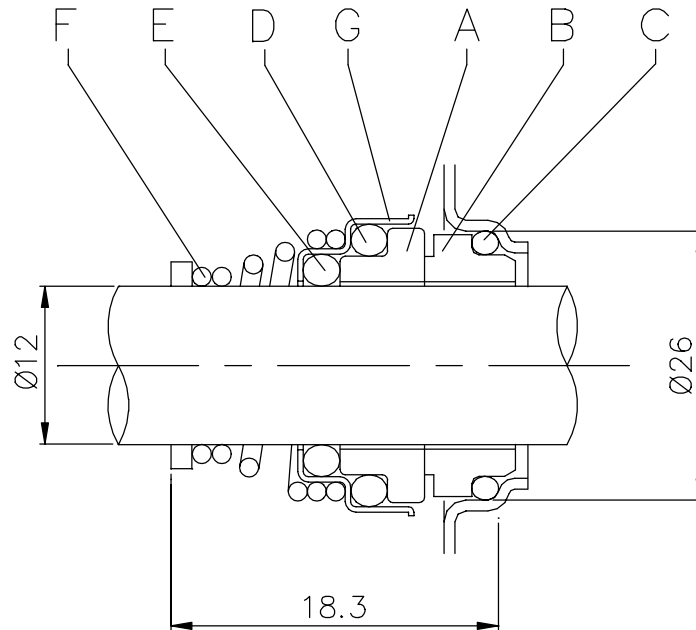
[1] Only for single phase

[2] Only for three phase

[3] Only for IP55



## MECHANICAL SEAL



REF	PART NAME	MATERIAL
A	Rotary seal ring	ceramic
B	Stationary seal ring	carbon graphite
C	O Ring	NBR
D	O Ring	NBR
E	O Ring	NBR
F	Self driving spring	AISI 316
G	Frame	AISI 304

DIAGRAM AND ELECTRIC CONNECTIONS

SINGLE PHASE MOTOR

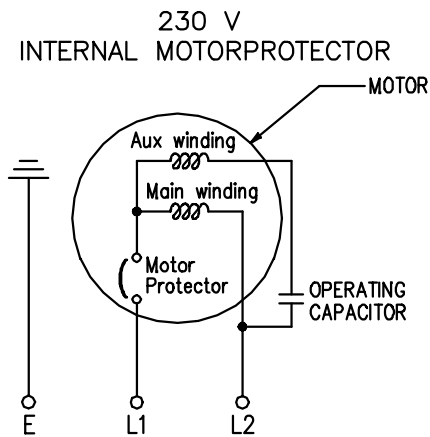
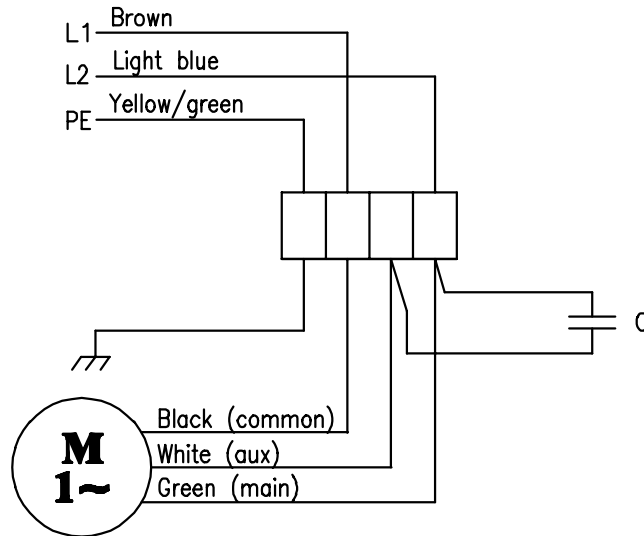
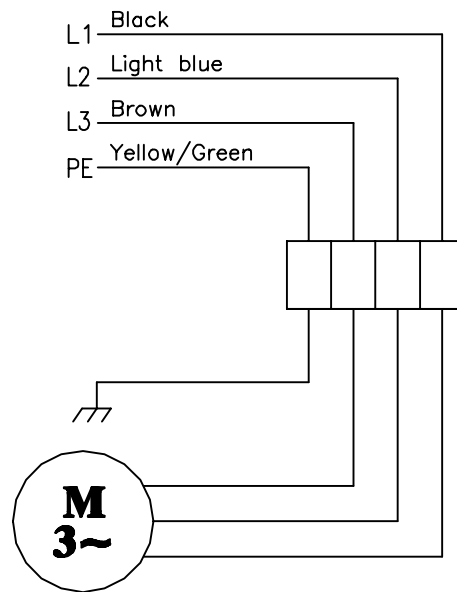


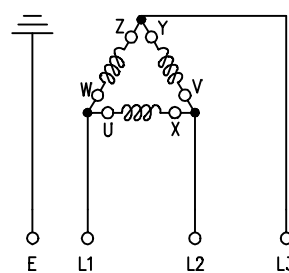
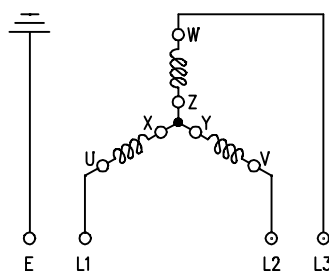
DIAGRAM AND ELECTRIC CONNECTIONS

THREE PHASE MOTOR

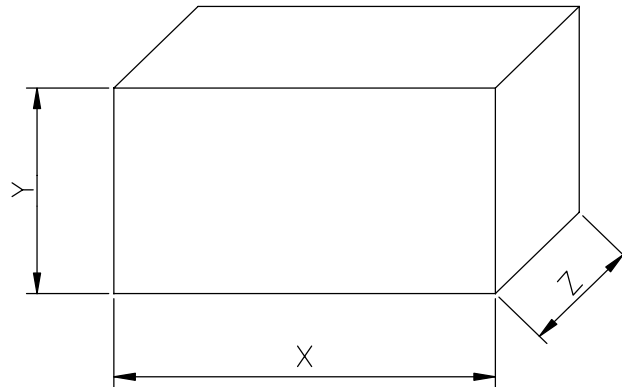


400 V  
STAR CONNECTION

230 V  
DELTA CONNECTION







Type pumps		PACKING [mm]			WEIGHT [kg]	
Single Phase	Three Phase	X	Y	Z	Single Phase	Three Phase
JESM 5	JES 5	190	190	370	5.6	5.6
JESM 6	JES 6	190	190	370	5.8	5.8
JESM 8	JES 8	190	190	370	6	6

Type pumps		kW	HP	Capacitor		Input		Full load current			Locked rotor current		
Single Phase 230 V 50 Hz	Three Phase 230/400 V 50 Hz			Single Phase µF	Vc	Single Phase	Three Phase	Single Phase	Three Phase		Single Phase 230 V 50 Hz	230 V 50 Hz	400 V 50 Hz
JESM 5	JES 5	0.37	0.5	10	450	0.44	0.43	2.1	1.5	0.85	6.3	6.4	3.7
JESM 6	JES 6	0.45	0.6	10	450	0.54	0.49	2.4	1.9	1.1	8.5	8.6	5
JESM 8	JES 8	0.6	0.8	12.5	450	0.63	0.58	3.0	2.25	1.3	10.6	10.7	6.2

Type pumps		Ball Bearing	
Single Phase 230 V 50 Hz	Three Phase 230/400 V 50 Hz	Pump side	Fan side
JESM 5	JES 5	6201 ZZ	6201 ZZ
JESM 6	JES 6	6201 ZZ	6201 ZZ
JESM 8	JES 8	6201 ZZ	6201 ZZ

## ATTENTION ON INSTALLATION OF THE PUMP

50Hz

If you use this pump on suction condition, it tends to breathe the air from outside because the pressure in pump becomes vacuum condition when it stopped. So water in the pump sometimes fall down to breath the air from pipe connection. If it is used to operate continuously under this condition, this is the cause of breakdown to overheat inside the pump.



**So please install foot valve or check valve at suction pipe in order to prevent the pump from such a condition. And moreover will you please support the suction pipe and the delivery one to prevent the pump from leaning the weight of pipe.**

