




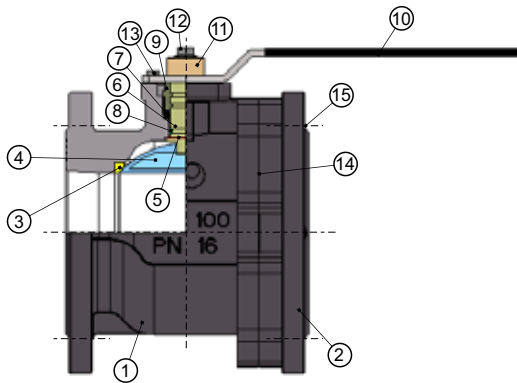


GHISA - IVR 77 - IVR 78

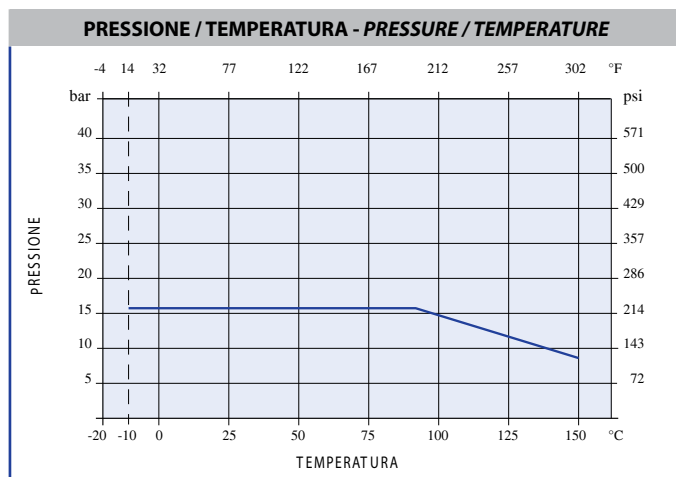



-  Valvola a sfera in ghisa GJL 250 - A ttacchi flangiati PN 16 (IVR 77)
Valvola a sfera in ghisa GJL 250 - asta e sfera inox - A ttacchi flangiati PN 16 (IVR 78)
Impieghi: installazioni idrotermosanitarie, acqua surriscaldata, aria compressa, aquedotti, idrocarburi (non gassosi) ed olii.
-  Cast iron GJL 250 ball valve - Flanged ends PN 16 (IVR 77)
Cast iron GJL 250 ball valve - Inox stem and ball - Flanged ends PN 16 (IVR 78)
Application: Hydrothermosanitary plants, overheated water, compressed air, waterworks, hydrocarbons (non-gaseous) and oils.
-  Kugelhahn aus Gusseisen GJL 250 - Flanschanschlüsse PN 16 (IVR 77)
Kugelhahn aus Gusseisen GJL 250 - Stab und Kugel aus Edelstahl - Flanschanschlüsse PN 16 (IVR 78)
Anwendung: hydrothermische Sanitäreanlagen, überhitztes Wasser, Druckluft, Wasserleitungen, Kohlenwasserstoffen (nicht gasförmig) und Öle.
-  Vanne à boisseau sphérique en fonte GJL 250 - Fixations bridées PN 16 (IVR 77)
Vanne à boisseau sphérique en fonte GJL 250 - tige et sphère inox - fixations bridées PN 16 (IVR 78)
Application: Installations hydro-thermo sanitaires, eau surchauffée, air comprimé, aqueducs, hydrocarbures (non gazeux) et huiles
-  Шаровой кран из чугуна GJL 250 - Фланцевое соединение PN 16 (IVR 77)
Шаровой кран из чугуна GJL 250 - Шток и шар из нержавеющей стали - Фланцевое соединение PN 16 (IVR 78)
Сфера применения: теплоснабжение, водоснабжение, сжатый воздух, (без газообразных) углеводородов, масла.




N	DENOMINAZIONE PART NAME	MATERIALE MATERIAL	TRATTAMENTO TREATMENT
1	Corpo - Body	Ghisa GJL250 Cast iron GJL250	Verniciato - Painted
2	Flangia - Flange	Ghisa GJL250 Cast iron GJL250	Verniciato - Painted
3	Seggio - Seat	PTFE	
4	Sfera - Ball	Ottone - Brass G-CuZn38Pb2-UNI 5035/62	Cromata - Chrome plated
4*	Sfera - Ball	AISI 304	
5	Rondella - Seat	PTFE	
6	Asta - Stem	AVP - 9SMnPb36	
6*	Asta - Stem	AISI 304	
7	O-Ring - O-Ring	FP	
8	O-Ring - O-Ring	FP	
9	Premistoppa Packing nut	Ottone - Brass CW 614N - UNI EN 12164/98	
10	Maniglia - Handle	Acciaio - Steel	Rivest. PVC - Plastic coated
11	Cappuccio - Cap	Ottone - Brass CW 614N - UNI EN 12164/98	Nichelato - Nickel plated
12	Vite - Screw	Acciaio - Steel	Zincato - Zinc plated
13	Vite - Screw	Acciaio - Steel	Zincato - Zinc plated
14	O-Ring - O-Ring	FP	
15	Vite - Screw	Acciaio - Steel	Zincato - Zinc plated

*IVR 78 - come IVR 77 ma con sfera e asta in acciaio INOX AISI 304
*IVR 78 - like IVR 77 but with steel AISI 304 stem and ball



Size 
DN20-DN150 16 bar

Max  +150° C
Min -10° C

Estremità flangiata
Flanged ends
UNI-EN 1092

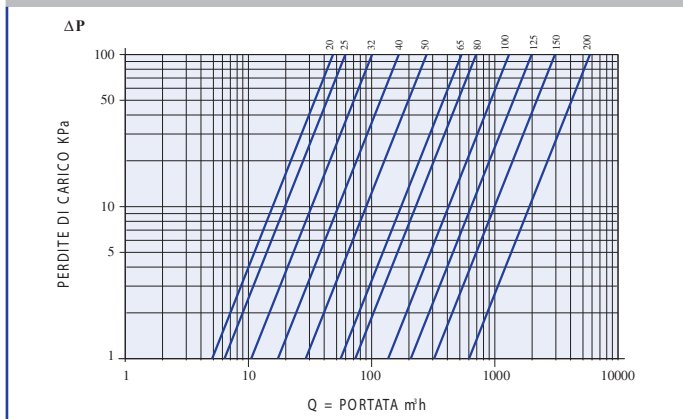
Asta antisceppio
Anti blow-out stem

CE 1115

Ed. 09/16

Tutte le caratteristiche tecniche dei prodotti sono soggette a modifiche senza preavviso - All product's technical specifications are subject to modification without prior notice

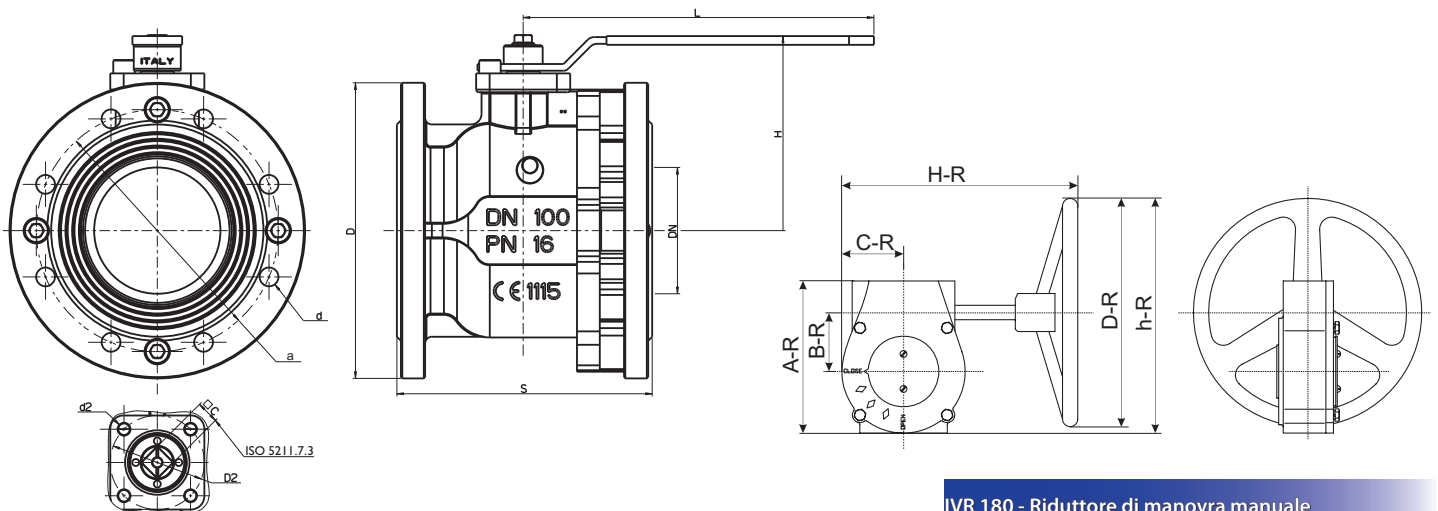
PERDITE DI CARICO - FLOW AND PRESSURE DROPS



Misura - Size	KV
DN 20	45
DN 25	60
DN 32	100
DN 40	170
DN 50	265
DN 65	510
DN 80	790
DN 100	1230
DN 125	1900
DN 150	2900
DN 200	5700

DIMENSIONI - DIMENSIONS (mm)






DN	Ø	S	H	L	D	a	N°fori	M fori	d fori	F.ISO	D2	□C	A-R	B-R	C-R	D-R	h-R	H-R
20	20	120	73	200	105	75	4	*	14	F04	42	9	*	*	*	*	*	*
25	25	125	77	200	115	85	4	*	14	F04	42	9	*	*	*	*	*	*
32	32	130	82	200	140	100	4	*	18	F04	42	9	*	*	*	*	*	*
40	40	140	92	240	150	110	4	*	18	F05	50	14	127	45	52	150	175	210
50	50	150	99	240	165	125	4	*	18	F05	50	14	127	45	52	150	175	210
65	61	170	121	260	185	145	4	*	18	F07	70	17	127	45	52	150	175	210
80	74	180	130	260	200	160	8	*	18	F07	70	17	127	45	52	150	175	210
100	95	190	144	260	220	180	8	*	18	F07	70	17	127	45	52	150	175	210
125	120	200	185	450	250	210	8	M16	*	F10	102	22	170	63	73	288	280	315
150	145	210	204	450	285	240	8	M20	*	F10	102	22	170	63	73	288	280	315
200	200	400	325	700	340	295	12	*	22	*	*	*	*	*	*	*	*	*



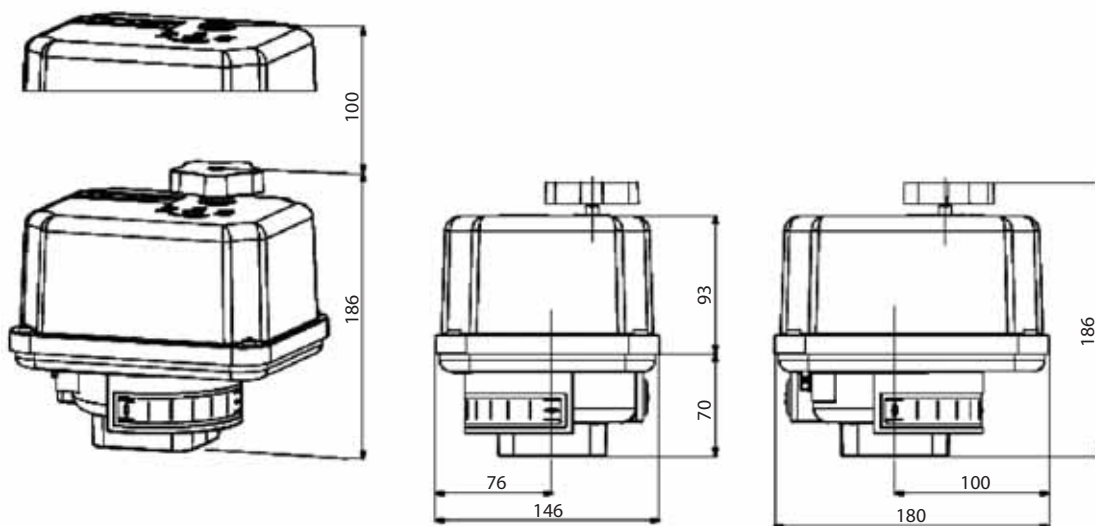
IVR 180 - Riduttore di manovra manuale
 IVR 180 - Manual gearbox
 IVR 180 - Manuelles Getriebe
 IVR 180 - Réducteur de manoeuvre manuelle
 IVR 180 - Ручной редуктор управления

ATTUATORI ELETTRICI - IVR 272 m - IVR 272 t



-  IVR 272 m - Attuatori elettrici 1/4 di giro - Monofase c.a.
IVR 272 t - Attuatori elettrici 1/4 di giro - Trifase c.a.
-  IVR 272 m - Electrical quarter-turn actuators - 1-phase a.c.
IVR 272 t - Electrical quarter-turn actuators - 3-phase a.c.
-  IVR 272 m - Elektrische Antriebe mit 1/4-Umdrehung - einphasiger Wechselstrom
IVR 272 t - Elektrische Antriebe mit 1/4-Umdrehung - dreiphasiger Wechselstrom
-  IVR 272 m - Actuateurs électriques à 1/4 de tour - Monophasé c.a.
IVR 272 t - Actuateurs électriques à 1/4 de tour - Triphasé c.a.
-  IVR 272 m - Электроприводы на 1/4 оборота – однофазные - переменный ток
IVR 272 t - Электроприводы на 1/4 оборота – трёхфазные - переменный ток

MH-R25/12 MH-R-E25/17



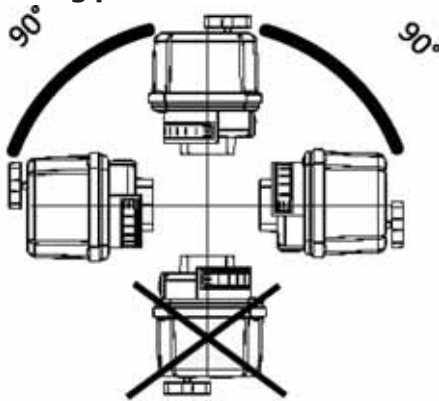
Operating time/90°	17 s (50Hz) - 14 s (60Hz)			9 s
Power supply (V)	230 VAC 1~	*115 VAC 1~	*24 VAC	*24 VDC
Frequency (Hz)	50 / 60	50 / 60	50 / 60	-
Nominal Current (A)	0.08	0.15	0.8	0.6
Max current (A)	0.09	0.18	0.96	1.2
Power consumption (W)	17 / 23	18 / 20	18 / 23	15
Max. torque	25 Nm			
Flange	F04/F07 or F05/F07 according to ISO 5211			
Actuator	Class C according to EN 15714-2			
Standard equipment				
Duty cycle IEC 60034-1.8	S2 - 20 min, S3/S4 1200 c/h - 25% ED at 25°C			
Ambient temperature (°C)	-25°C to + 70°C			
Motor protection	Thermo switch			Multifuse
Add'l position switches 2WE	2 additional position switches included (changeover contact) ampacity: 1 A inductive, 3 A ohmic; max. voltage: 250 VAC			
Drive bush	17 mm double square			
Overvoltage category	II			

- * 24 Volt - 115 Volt disponibile su richiesta
- * 24 Volt - 115 Volt available on request
- * 24 Volt - 115 Volt erhältlich auf Anfrage
- * 24 Volt - 115 Volt Disponible sur demande
- * 24 Volt - 115 Volt под заказ

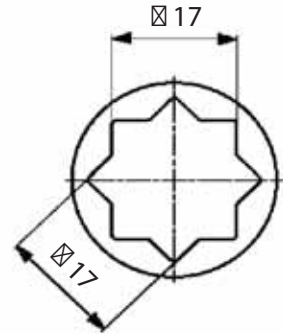
Ed. 12/16

Tutte le caratteristiche tecniche dei prodotti sono soggette a modifiche senza preavviso - All product's technical specifications are subject to modification without prior notice

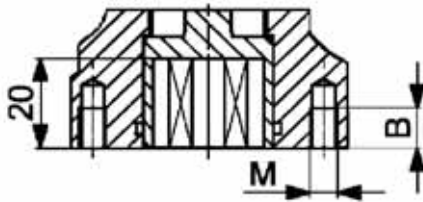
Mounting position



Double square drive



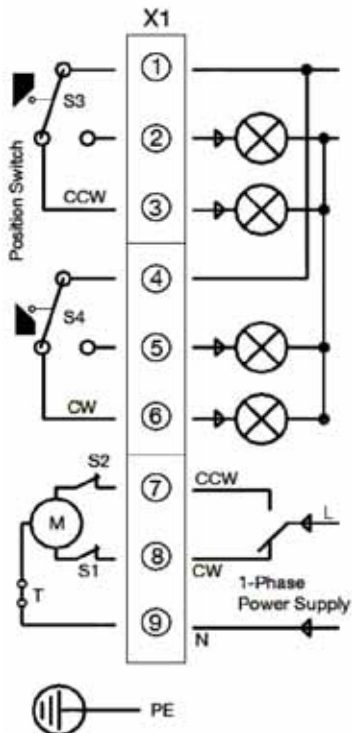
ISO Flange



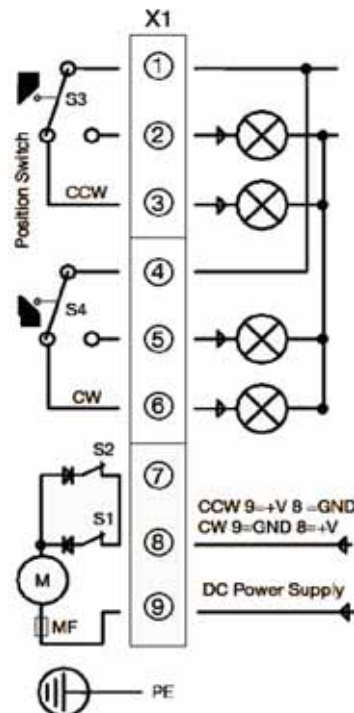
ISO 5211	F04/F07	F05/F07
M	M 5 / M 8	M 6 / M 8
B	8 / 12 mm	9 / 12 mm

Electric wiring diagram

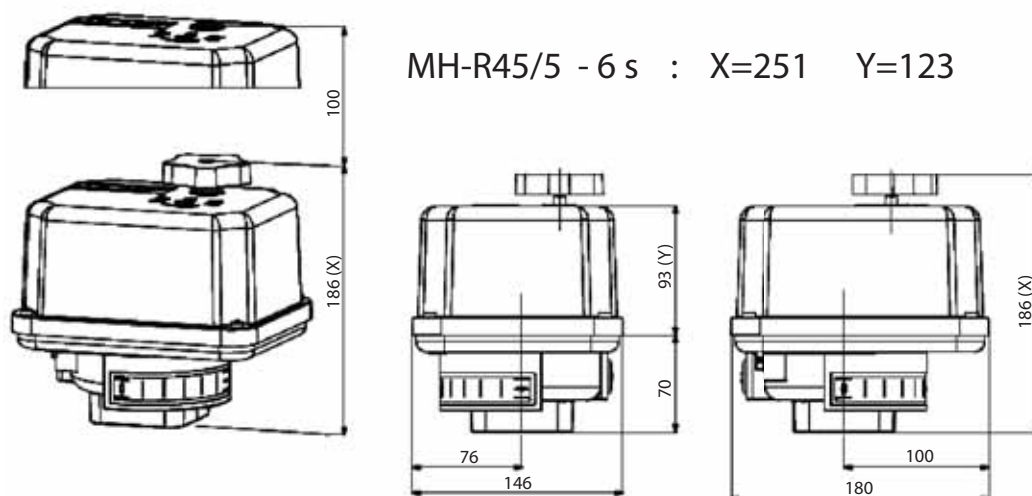
230,115,24 VAC 1 ~



24 VDC



MH-R45/30 MH-R45/5 MH-R-E50/33



Operating time/90° 6 s (50Hz) - 5 s (60Hz)

Power supply (V)	230 VAC 1~	*115 VAC 1~	*24 VAC	400 V 3~	
Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	
Nominal Current (A)	0.17	0.34	1.6	0.08	
Max current (A)	0.2	0.41	1.9	0.13	
Power consumption (W)	39	39	39	55	

Operating time/90° 33 s (50Hz) - 28 s (60Hz) 16 s

Power supply (V)	230 VAC 1~	*115 VAC 1~	*24 VAC		*24 VDC
Frequency (Hz)	50 / 60	50 / 60	50 / 60		-
Nominal Current (A)	0.05	0.13	0.6		0.6
Max current (A)	0.06	0.15	0.73		1.2
Power consumption (W)	13	15	15		15

Operating time/90° 80 s (50Hz) - 67 s (60Hz)

Power supply (V)	230 VAC 1~	*115 VAC 1~	*24 VAC		
Frequency (Hz)	50 / 60	50 / 60	50 / 60		
Nominal Current (A)	0.03	0.07	0.33		
Max current (A)	0.04	0.08	0.4		
Power consumption (W)	8	8	8		

Max. torque 50 Nm

Flange F04/F07 or F05/F07 according to ISO 5211

Actuator Class C according to EN 15714-2

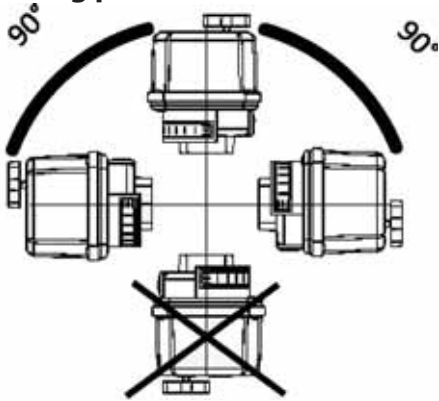
Standard equipment

Duty cycle IEC 60034-1.8	S2 - 20 min, S3/S4 1200 c/h - 25% ED at 25°C	
Ambient temperature (°C)	-25°C to + 70°C	
Motor protection	Thermo switch	Multifuse
Add'l position switches 2WE	2 additional position switches included (changeover contact) ampacity: 1 A inductive, 3 A ohmic; max. voltage: 250 VAC	
Drive bush	17 mm double square	
Overvoltage category	II	

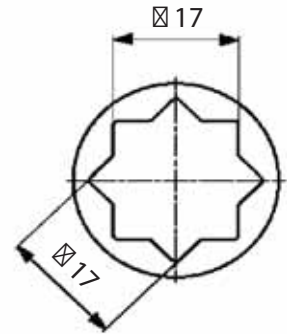
- * 24 Volt - 115 Volt disponibile su richiesta
- * 24 Volt - 115 Volt available on request
- * 24 Volt - 115 Volt erhältlich auf Anfrage
- * 24 Volt - 115 Volt Disponible sur demande
- * 24 Volt - 115 Volt под заказ

Tutte le caratteristiche tecniche dei prodotti sono soggette a modifiche senza preavviso - All product's technical specifications are subject to modification without prior notice

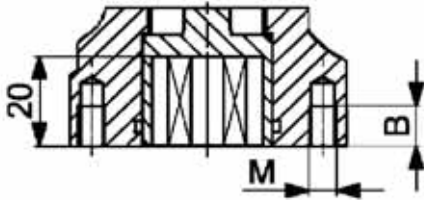
Mounting position



Double square drive



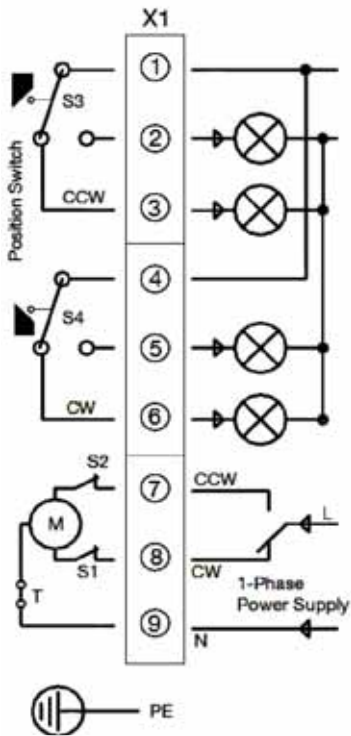
ISO Flange



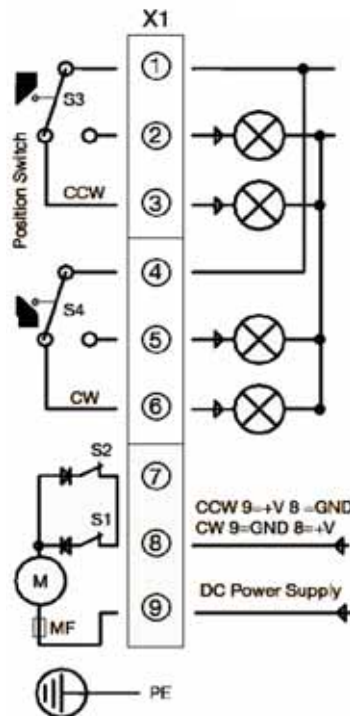
ISO 5211	F04/F07	F05/F07
M	M 5 / M 8	M 6 / M 8
B	8 / 12 mm	9 / 12 mm

Electric wiring diagram

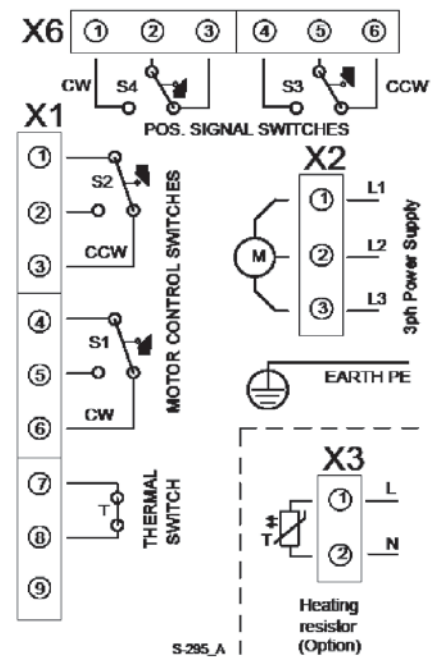
230,115,24 VAC 1 ~



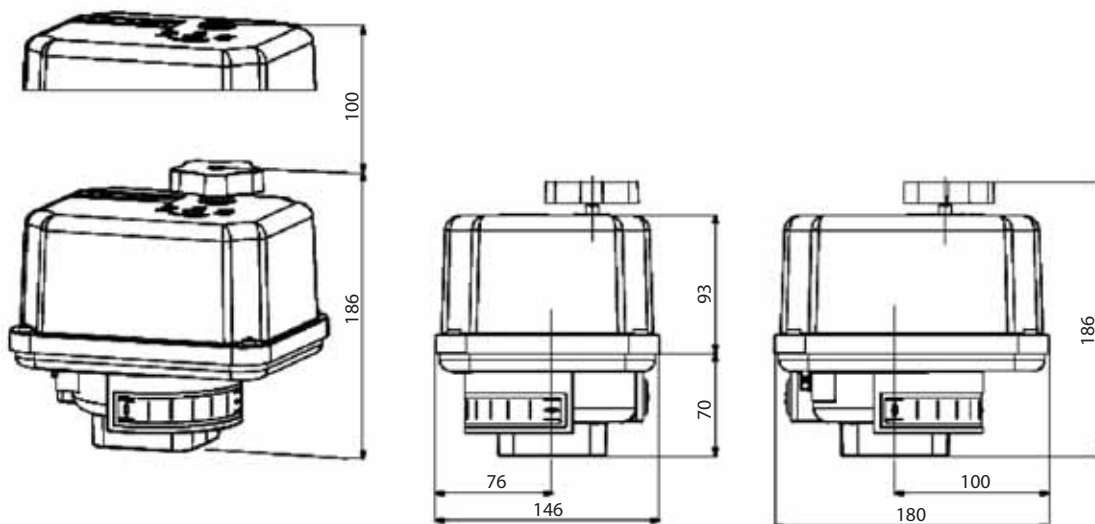
24 VDC



400 VAC



MH-Q52/22
MH-Q67/32
MH-Q77/60

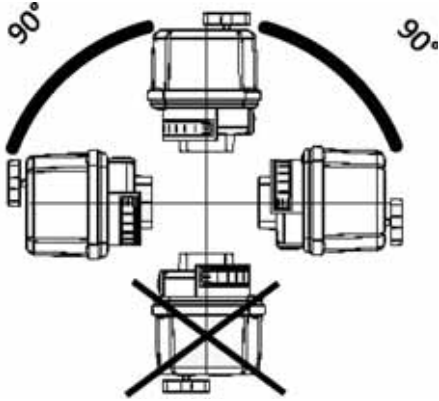


Operating time/90°	23 s (50Hz) - 19 s (60Hz)				32 s
Power supply (V)	230 VAC 1~	*115 VAC 1~	*24 VAC 1~	400 VAC 3~	*24 VDC
Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	-
Nominal Current (A)	0.12	0.23	1.1	0.065 ¹	1.3
Max current (A)	0.14	0.28	1.3	0.075 ¹	2.5
Power consumption (W)	27	27	27	45	31
Max. torque	100 Nm				
Flange	F05 or F07 according to ISO 5211				
Actuator	Class C according to EN 15714-2				
Standard equipment					
Duty cycle IEC 60034-1.8	S2 - 30 min, S3/S4 1200 c/h - 25% ED at 25°C				
Ambient temperature (°C)	-25°C to + 70°C				
Motor protection	Thermo switch				Multifuse
Add'l position switches 2WE	2 additional position switches included (changeover contact) ampacity: 1 A inductive, 3 A ohmic; max. voltage: 250 VAC				
Drive bush	22 mm double square				
Overvoltage category	II				

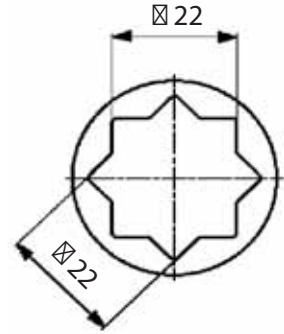
* 24 Volt - 115 Volt disponibile su richiesta
 * 24 Volt - 115 Volt available on request
 * 24 Volt - 115 Volt erhältlich auf Anfrage
 * 24 Volt - 115 Disponible sur demande
 * 24 Volt - 115 Volt под заказ

¹ per phase

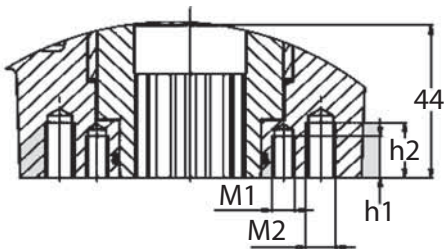
Mounting position



Double square drive



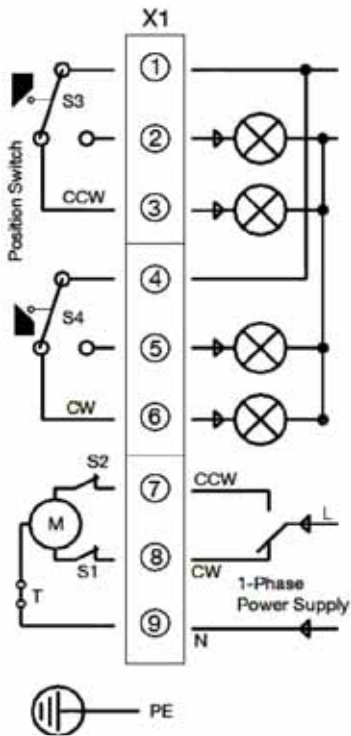
ISO Flange



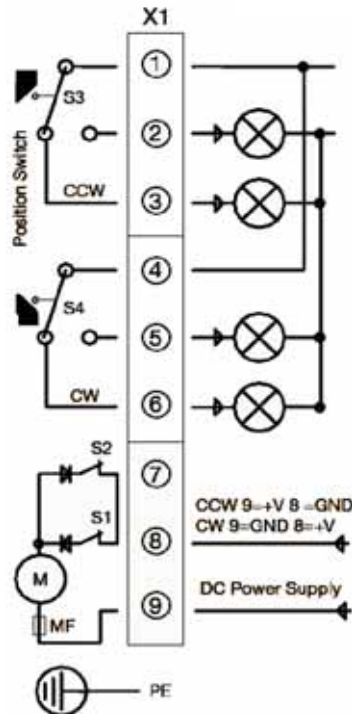
ISO 5211	F05	F07
M1	M6	-
M2	-	M8
h1	12	-
h2	-	16

Electric wiring diagram

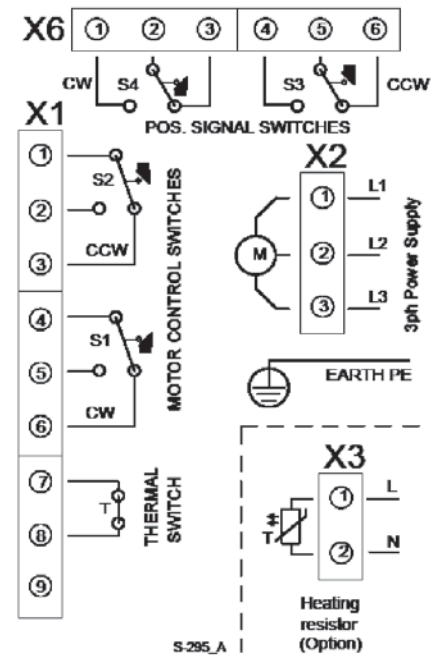
230,115,24 VAC 1 ~



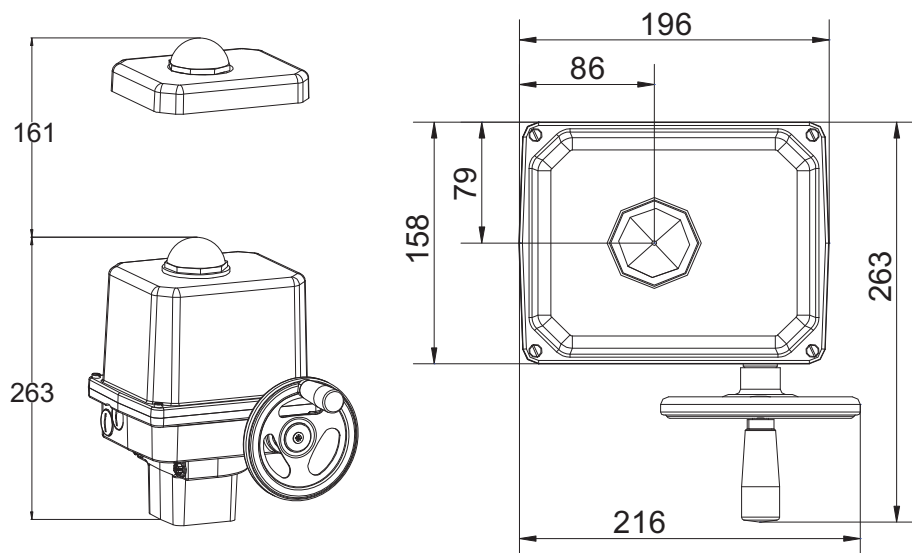
24 VDC



400 VAC



MH-Q102/32



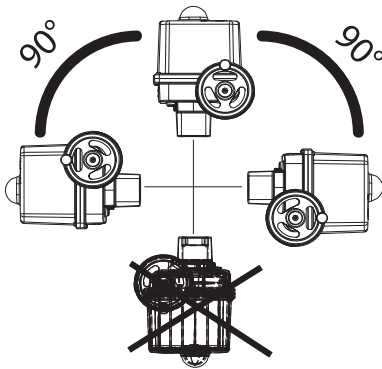
Operating time/90°	32 s (50Hz) - 27 s (60Hz)		32 s		
Power supply (V)	230 VAC 1~	*115 VAC 1~	*24 VAC 1~	400 VAC 3~	*24 VDC
Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	-
Rated Current (A)	0.27/0.23	0.57/0.05	2.7/2.3	0.12	1.3
Max current (A)	0.33/0.28	0.68/0.60	3.3/2.8	0.15	2.5
Power consumption (W)	62/53	64/55	62/52	51	31
Switching torque ¹	130 Nm				
Flange	F05 + F07 according to ISO 5211				
Modulating actuator	Class C according to EN 15714-2				
Standard equipment					
Duty cycle IEC 60034-1	S2 - 30 min / S4 50% ED - 1200 c/h				
Ambient temperature (°C)	-20°C to +80°C (S2) / -20°C to +60°C (S4)				
Motor protection	Thermo switch ²				Multifuse
Overvoltage category	II				

* 24 Volt - 115 Volt disponibile su richiesta
 * 24 Volt - 115 Volt available on request
 * 24 Volt - 115 Volt erhältlich auf Anfrage
 * 24 Volt - 115 Disponible sur demande
 * 24 Volt - 115 Volt под заказ

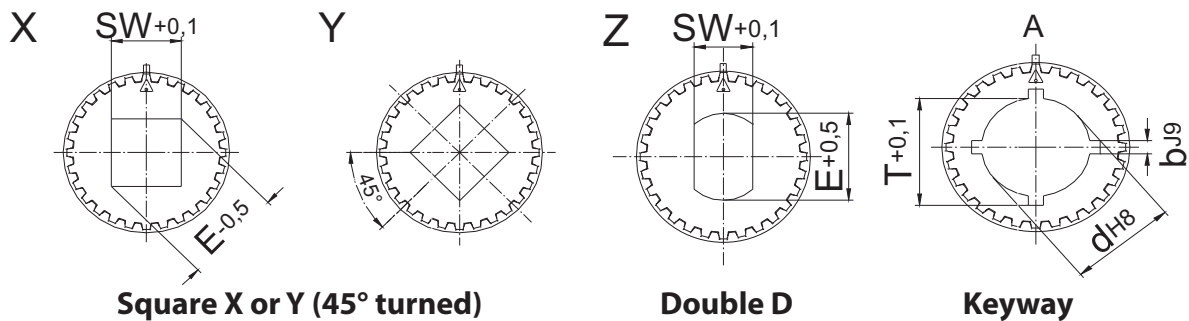
¹ 65 Nm modulating torque

² Thermo switch must be wired externally at 400 VAC 3~

Mounting position



Drive bush



Square X or Y (45° turned)

Double D

Keyway

Square X or Y

SW (mm)	10	11	12	14	16	17	22
---------	----	----	----	----	----	----	----

Double D

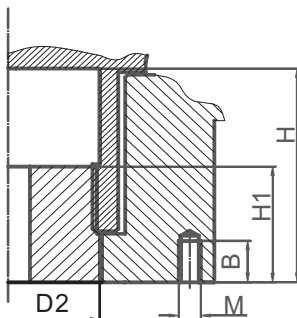
SW (mm)	9	11	14	17
E (mm)	12.1	14.1	18.1	22.2

Keyway

(DIN 6885/1-J9)

d (mm)	10	12	14	16	18	20	22	23	24	25
b (mm)	3	4	5	5	6	6	6	8	8	8

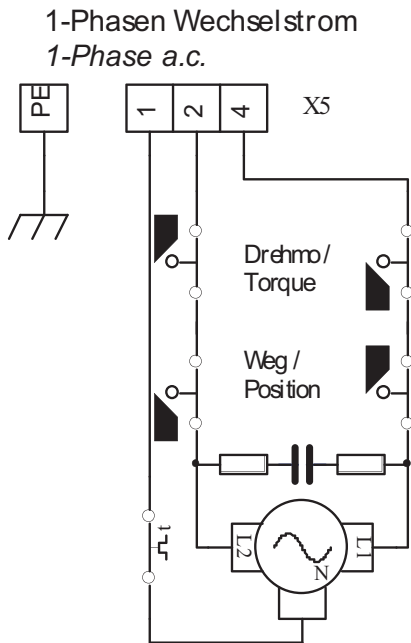
ISO Flange



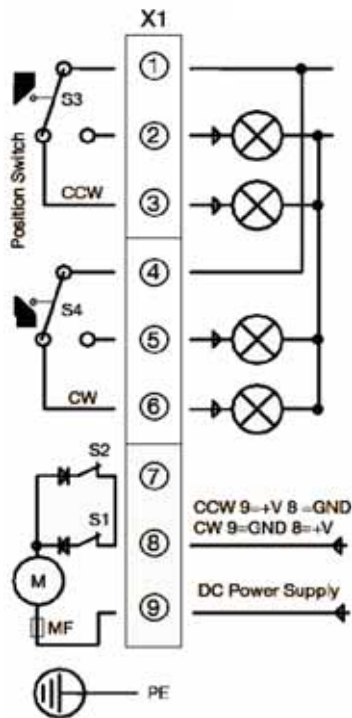
ISO 5211	F05	F07
D2	38	44
H	44	44
h1	35	35
M	M6	M8
B	12	16

Electric wiring diagram

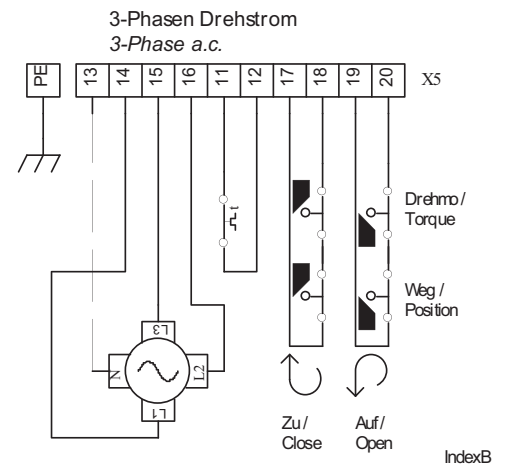
230,115,24 VAC 1 ~



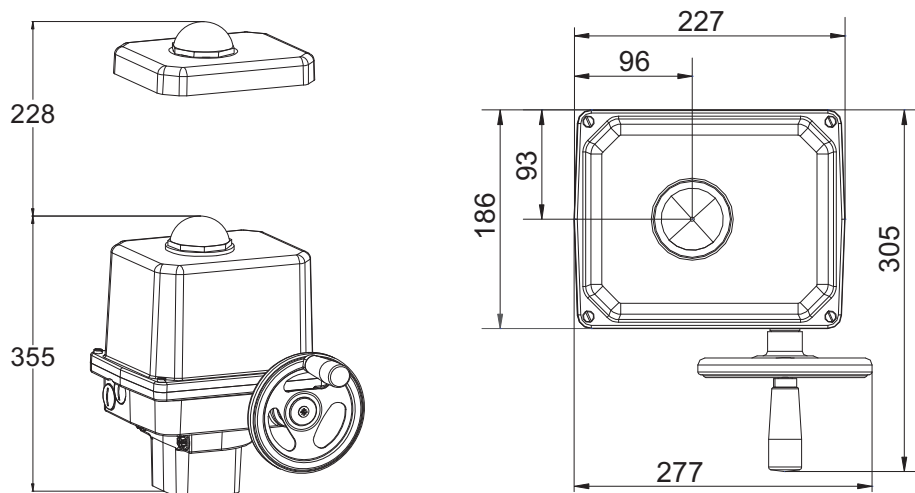
24 VDC



400 VAC



MH-Q202/69



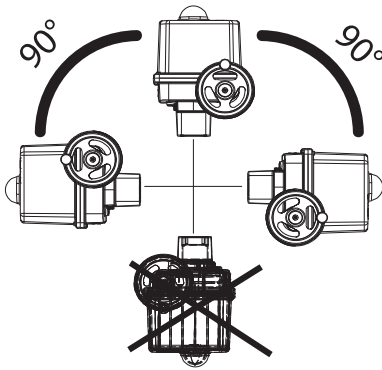
Operating time/90°	69 s (50Hz) - 57 s (60Hz)				60 s
Power supply (V)	230 VAC 1~	*115 VAC 1~	*24 VAC 1~	400 VAC 3~	*24 VDC
Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	-
Rated Current (A)	0.27	0.57	2.7	0.12	1.3
Max current (A)	0.33	0.68	3.3	0.15	2.5
Power consumption (W)	62	64	64	51	30
Switching torque ¹	250 Nm				
Flange	F07 + F10 according to ISO 5211				
Modulating actuator	Class C according to EN 15714-2				
Standard equipment					
Duty cycle IEC 60034-1	S2 - 30 min / S4 50% ED - 1200 c/h				
Ambient temperature (°C)	-20°C to +80°C (S2) / -20°C to +60°C (S4)				
Motor protection	Thermo switch ²				Multifuse
Overvoltage category	II				

* 24 Volt - 115 Volt disponibile su richiesta
 * 24 Volt - 115 Volt available on request
 * 24 Volt - 115 Volt erhältlich auf Anfrage
 * 24 Volt - 115 Disponible sur demande
 * 24 Volt - 115 Volt под заказ

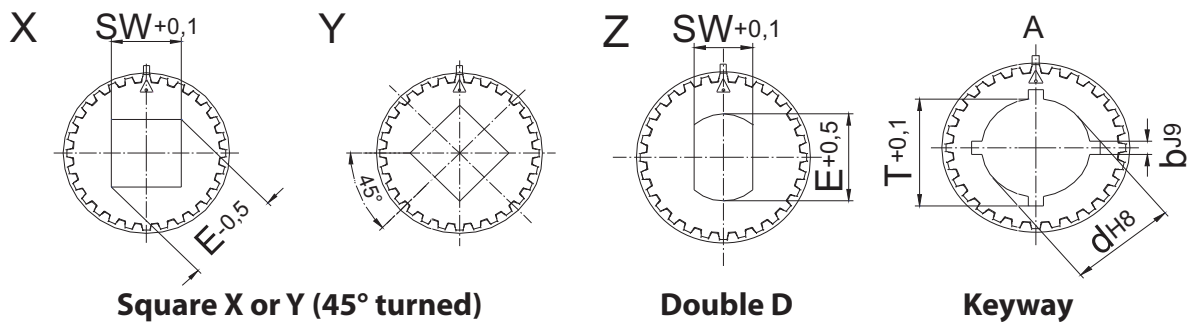
¹ 115 Nm modulating torque

² Thermo switch must be wired externally at 400 VAC 3~

Mounting position



Drive bush



Square X or Y

SW (mm)	10	11	12	14	16	17	22
---------	----	----	----	----	----	----	----

Double D

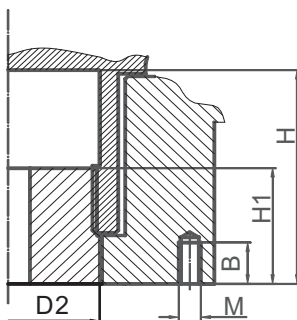
SW (mm)	9	11	14	17
E (mm)	12.1	14.1	18.1	22.2

Keyway

(DIN 6885/1-J9)

d (mm)	10	12	14	16	18	20	22	23	24	25
b (mm)	3	4	5	5	6	6	6	8	8	8

ISO Flange



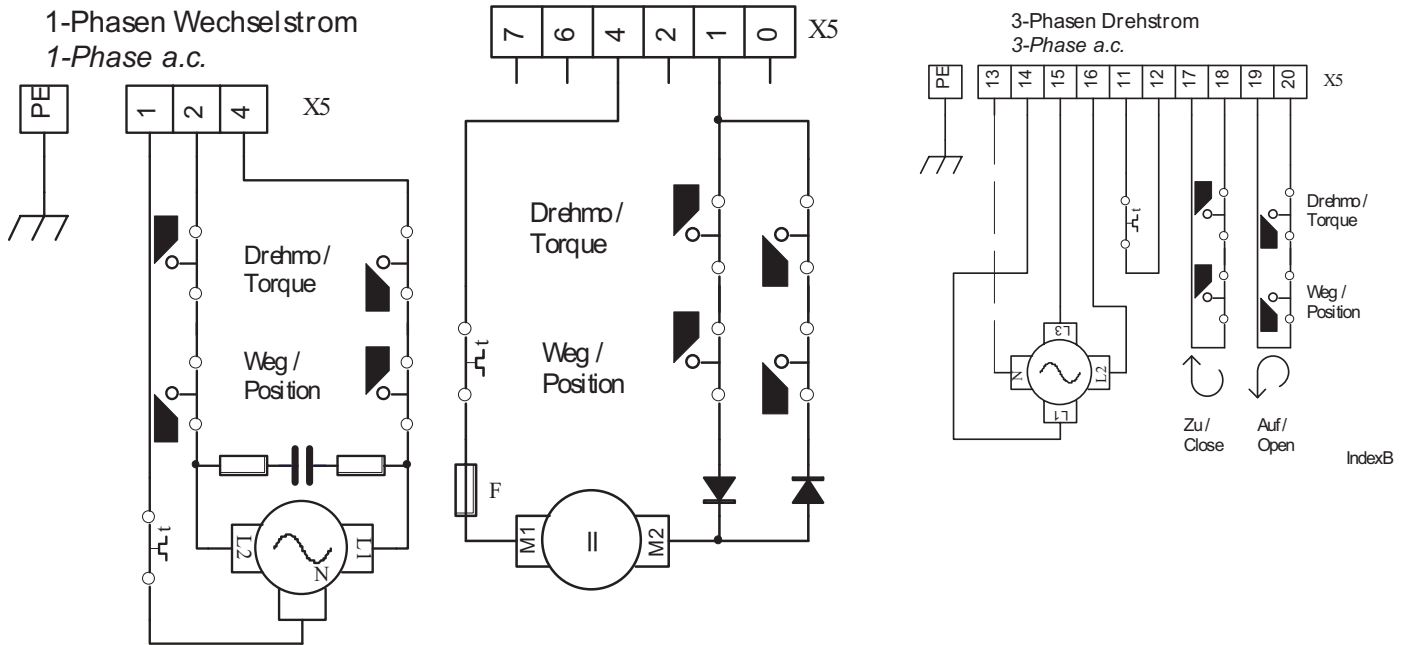
ISO 5211	F07	F10
D2	47	47
H	60	60
h1	35	35
M	M8	M10
B	16	20

Electric wiring diagram

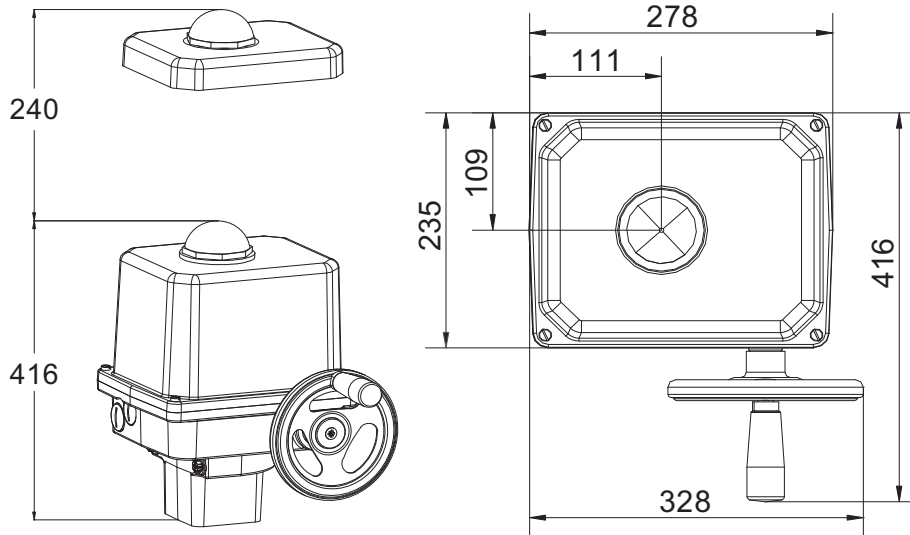
230,115,24 VAC 1 ~

24 VDC

400 VAC



MH-Q502/93



Operating time/90° 93 s (50Hz) - 77 s (60Hz)

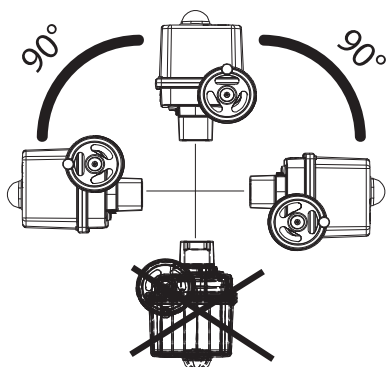
Power supply (V)	230 VAC 1~	*115 VAC 1~	*24 VAC 1~	400 VAC 3~
Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60
Rated Current (A)	0.37	0.87	3.5	0.18
Max current (A)	0.44	1.0	4.2	0.22
Power consumption (W)	83	98	82	75
Switching torque ¹	500 Nm			
Flange	F10 or F12 according to ISO 5211			
Modulating actuator	Class C according to EN 15714-2			
Standard equipment				
Duty cycle IEC 60034-1	S2 - 15 min / S4 50% ED -1200 c/h			
Ambient temperature (°C)	-20°C to +80°C (S2) / -20°C to +60°C (S4)			
Motor protection	Thermo switch ²			
Overvoltage category	II			

- * 24 Volt - 115 Volt disponibile su richiesta
- * 24 Volt - 115 Volt available on request
- * 24 Volt - 115 Volt erhältlich auf Anfrage
- * 24 Volt - 115 Disponible sur demande
- * 24 Volt - 115 Volt под заказ

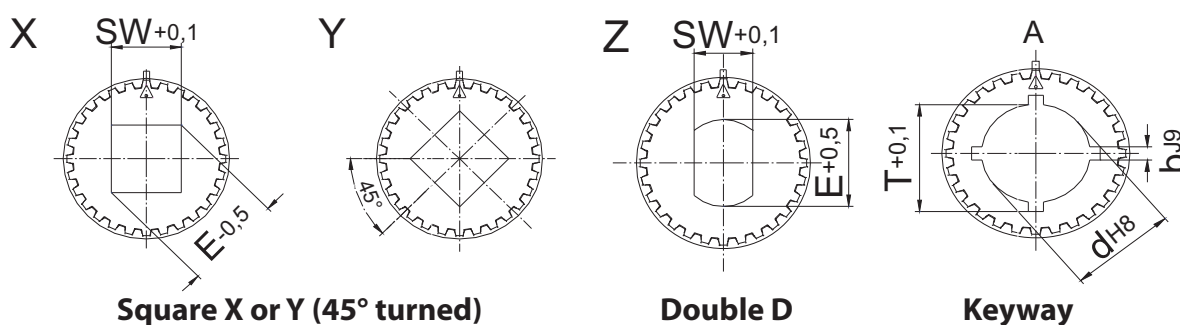
¹ 250 Nm modulating torque

² Thermo switch must be wired externally at 400 VAC 3~

Mounting position



Drive bush



Square X or Y

SW (mm)	10	11	12	14	16	17	22
---------	----	----	----	----	----	----	----

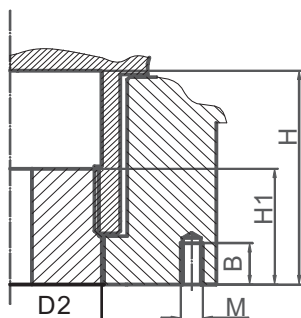
Double D

SW (mm)	9	11	14	17
E (mm)	12.1	14.1	18.1	22.2

Keyway (DIN 6885/1-J9)

d (mm)	10	12	14	16	18	20	22	23	24	25
b (mm)	3	4	5	5	6	6	6	8	8	8

ISO Flange



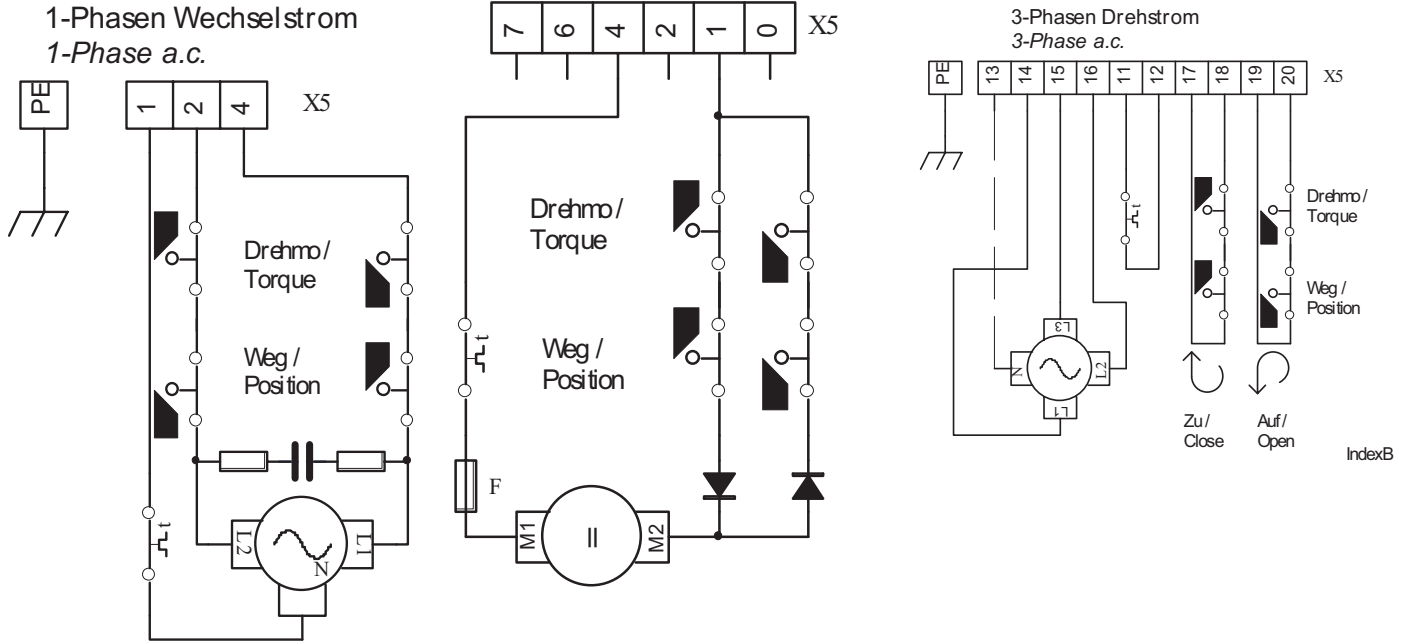
ISO 5211	F10	F12
D2	66	66
H	80	80
h1	48	48
M	M10	M12
B	18	18

Electric wiring diagram

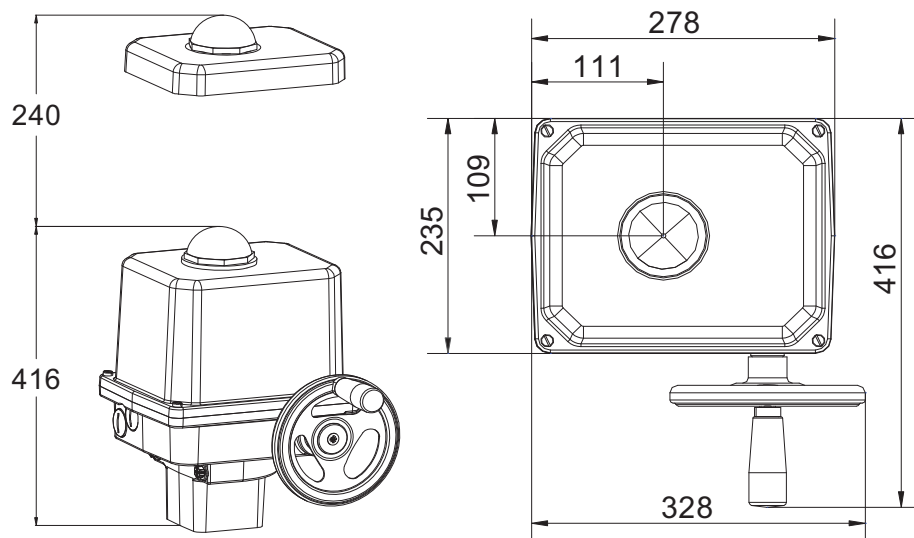
230,115,24 VAC 1 ~

24 VDC

400 VAC



MH-Q702/93



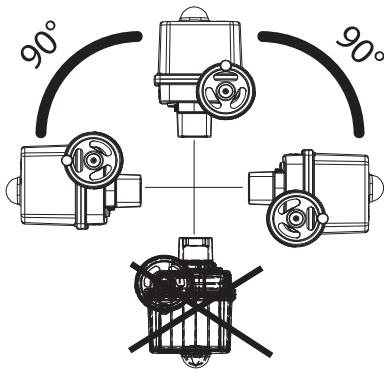
Operating time/90°		93 s (50Hz) - 77 s (60Hz)			
Power supply (V)	230 VAC 1~	*115 VAC 1~	*24 VAC 1~	400 VAC 3~	
Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	
Rated Current (A)	0.37	0.07	3.5	0.18	
Max current (A)	0.44	0.08	4.2	0.22	
Power consumption (W)	83	98	82	83	
Switching torque ¹	700 Nm				
Flange	F10 or F12 according to ISO 5211				
Modulating actuator	Class C according to EN 15714-2				
Standard equipment					
Duty cycle IEC 60034-1	S2 - 30 min / S4 50% ED -1200 c/h				
Ambient temperature (°C)	-20°C to + 80°C (S2) / -20°C to +60°C (S4)				
Motor protection	Thermo switch ²				
Overvoltage category	II				

* 24 Volt - 115 Volt disponibile su richiesta
 * 24 Volt - 115 Volt available on request
 * 24 Volt - 115 Volt erhältlich auf Anfrage
 * 24 Volt - 115 Disponible sur demande
 * 24 Volt - 115 Volt под заказ

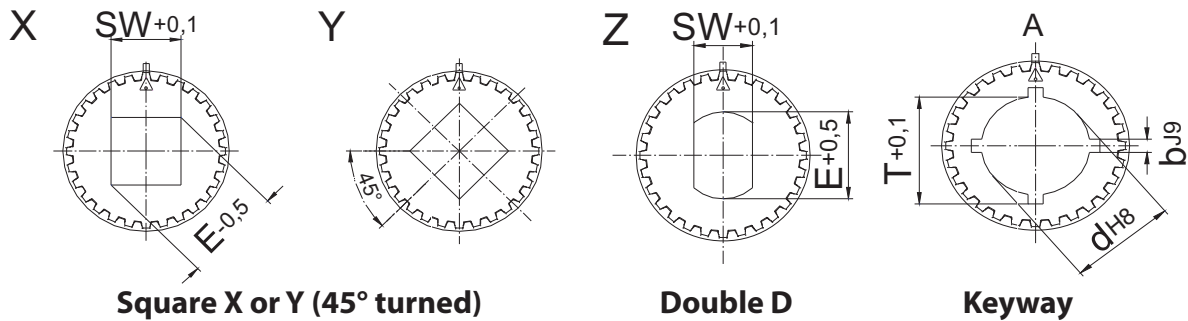
¹ 350 Nm modulating torque

² Thermo switch must be wired externally at 400 VAC 3~

Mounting position



Drive bush



Square X or Y (45° turned)

Double D

Keyway

Square X or Y

SW (mm)	10	11	12	14	16	17	22
---------	----	----	----	----	----	----	----

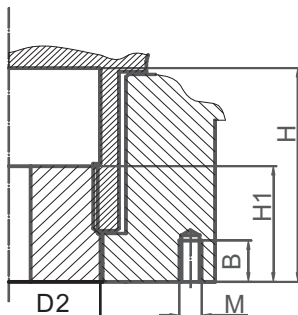
Double D

SW (mm)	9	11	14	17
E (mm)	12.1	14.1	18.1	22.2

Keyway (DIN 6885/1-J9)

d (mm)	10	12	14	16	18	20	22	23	24	25
b (mm)	3	4	5	5	6	6	6	8	8	8

ISO Flange



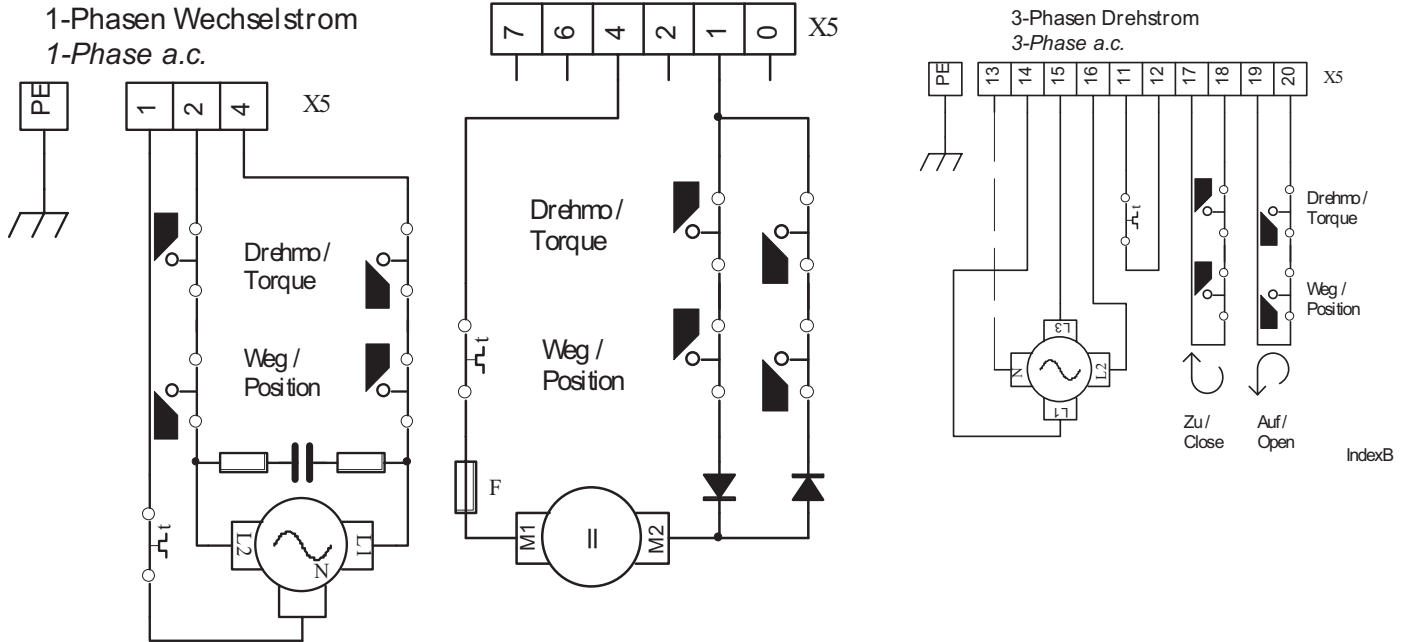
	ISO 5211	F10	F12
D2	66	66	66
H	80	80	80
h1	48	48	48
M	M10	M12	M12
B	18	18	18

Electric wiring diagram

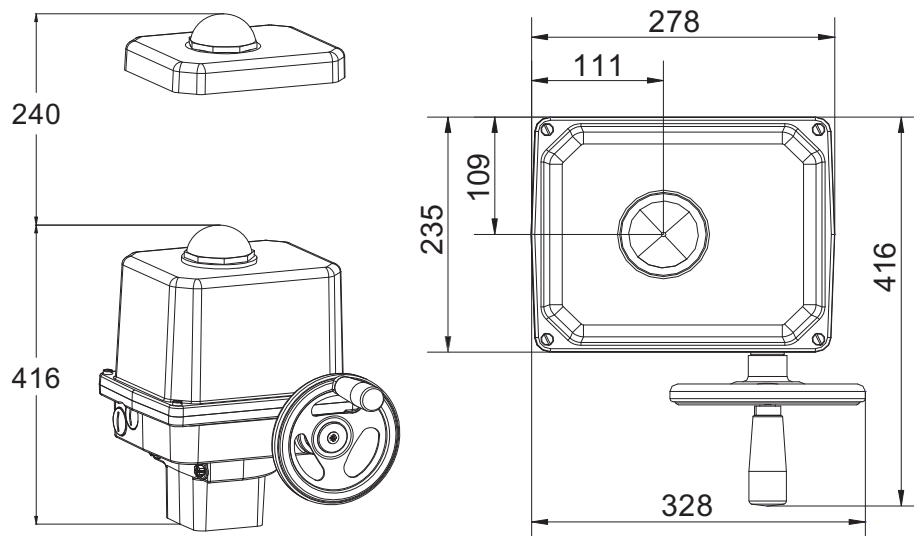
230,115,24 VAC 1 ~

24 VDC

400 VAC



MH-Q1002/93



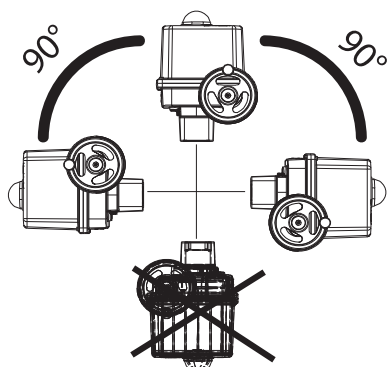
Operating time/90°	93 s (50Hz) - 77 s (60Hz)				120 s
Power supply (V)	230 VAC 1~	*115 VAC 1~	*24 VAC 1~	400 VAC 3~	24 VDC
Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	-
Rated Current (A)	0.7	1.4	6	0.23	4
Max current (A)	1.3	2.6	8	0.27	8
Power consumption (W)	160	160	140	107	100
Switching torque ¹	1000 Nm				
Flange	F12 or F14 according to ISO 5211				
Modulating actuator	Class C according to EN 15714-2				
Standard equipment					
Duty cycle IEC 60034-1	S2 - 30 min / S4 50% ED -1200 c/h				
Ambient temperature (°C)	-20°C to +80°C (S2) / -20°C to +60°C (S4)				
Motor protection	Thermo switch ²				
Overvoltage category	II				

* 24 Volt - 115 Volt disponibile su richiesta
 * 24 Volt - 115 Volt available on request
 * 24 Volt - 115 Volt erhältlich auf Anfrage
 * 24 Volt - 115 Disponible sur demande
 * 24 Volt - 115 Volt под заказ

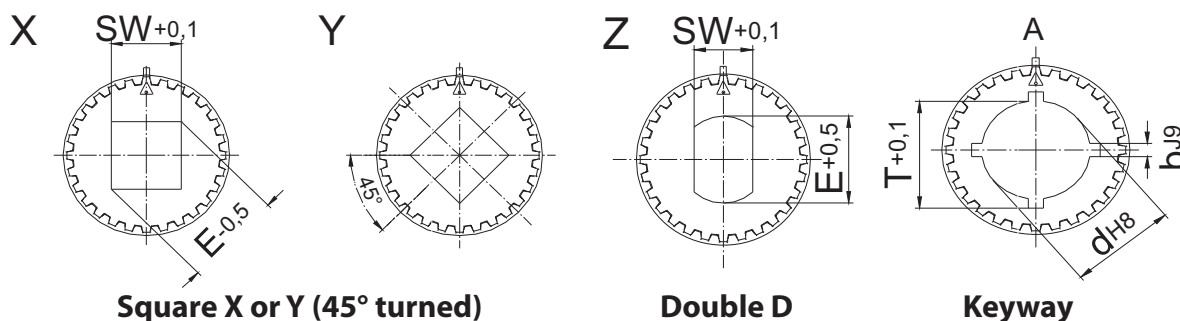
¹ 500 Nm modulating torque

² Thermo switch must be wired externally at 400 VAC 3~

Mounting position



Drive bush



Square X or Y (45° turned)

Double D

Keyway

Square X or Y

SW (mm)	10	11	12	14	16	17	22
---------	----	----	----	----	----	----	----

Double D

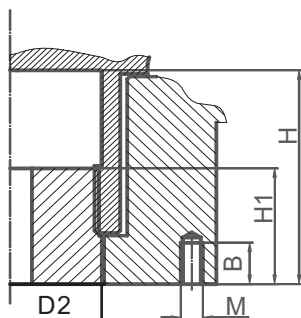
SW (mm)	9	11	14	17
E (mm)	12.1	14.1	18.1	22.2

Keyway

(DIN 6885/1-J9)

d (mm)	10	12	14	16	18	20	22	23	24	25
b (mm)	3	4	5	5	6	6	6	8	8	8

ISO Flange



	ISO 5211	F12	F14
D2	66	66	66
H	80	80	80
h1	48	48	48
M	M12	M16	M16
B	18	24	24

Electric wiring diagram

230,115,24 VAC 1 ~

24 VDC

400 VAC

