

Technical Description

Slip-on geared motor COMPACTA



Slip-on geared motor COMPACTA

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Slip-on geared motor COMPACTA

Technical description

1. Design

COMPACTA gear motors from Hein Lanz are, as the name implies, extremely compact dimensioned motors with integrated two, three or four stage gearing to produce the output speed and torque required in an application. Each COMPACTA is manufactured to the precise specifications ordered by the customer from the wide range of motor types, gear ratios and optional features shown in this catalogue. COMPACTA gear motors are used mainly in mechanical handling, automation and special machines where torque requirements may vary from 10 Nm up to 1600 Nm and output speeds from 193 rpm down to 1 rpm.

2. Special features

COMPACTA drive units differ from conventional gear motors in several fundamental areas:

- weight saving of 30-40 % due to all-aluminium vacuum die casting of very rigid design
- very small dimensions - high power density
- Integrated limit switches for positioning tasks (option)

3. Motors

A wide range of standard COMPACTA motor voltages and frequencies are available for single-phase and 3-phase AC as well as for 24 DC. With the exception of the DC version, all motors are fitted with a bi-metallic thermal protection (cuts out at 125°C). Standard enclosure rating is IP 54, insulation class B. Depending on the order 3-phase motors can either be connected Y or Δ .

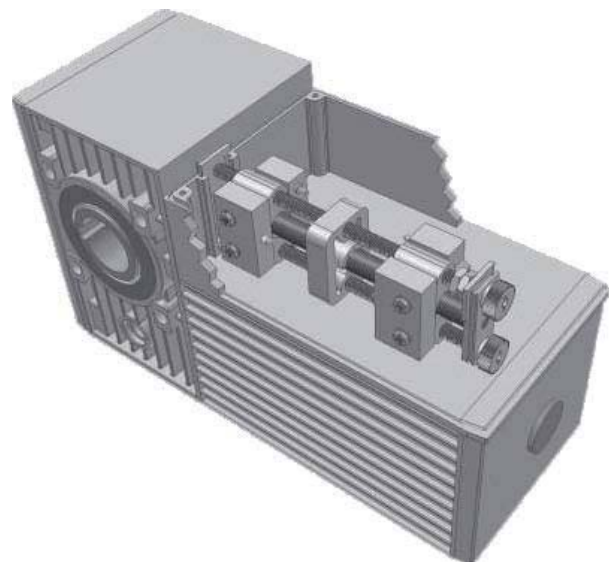
4. Duty cycle

COMPACTA gear motors are typically used for intermittent forward / reverse applications (max. duty rating 60 %) using the internal limit switches and a standard non-ventilated motor. For higher duty cycles there is an optional cooling fan or forced ventilation fan (duty rating 100 %) for type MS12. The duty cycle reference time is 10 minutes in a max. ambient temperature 40°C at an altitude of 1000 meters.

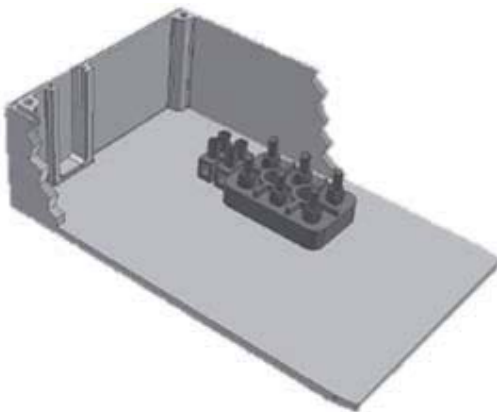
5. Limit switches (option)

Compacta gear motors with integrated limit switches are ideal drives for applications with reversing operation. The easy adjustment of the limit switches, the switch-off accuracy and the small size simplify design and installation.

A detailed description of the available limit switch versions follows. By changing the ratio or spindle-pitch of the limit switch mechanism the desired switch range (for maximum range see performance table) can be pre-selected. The limit switches are adjustable. For on-site fine tuning a screwdriver is all that is necessary.

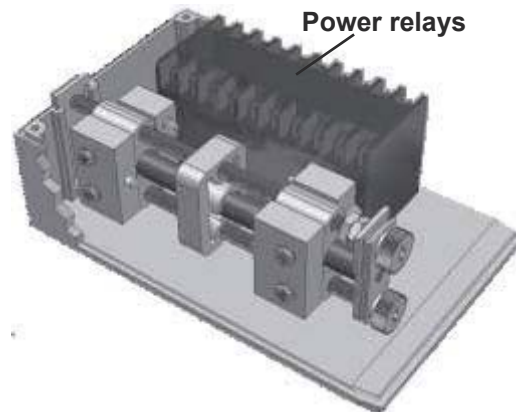


Slip-on geared motor COMPACTA



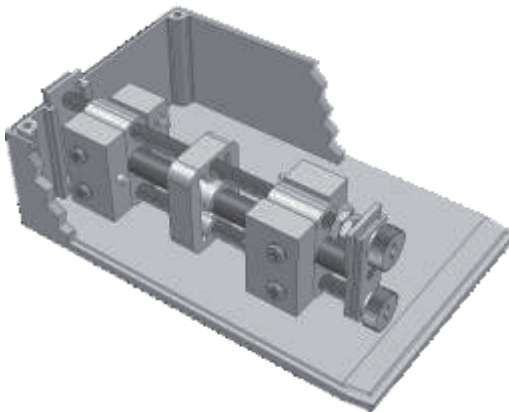
Version 00

Terminal box (box without switch mechanism)



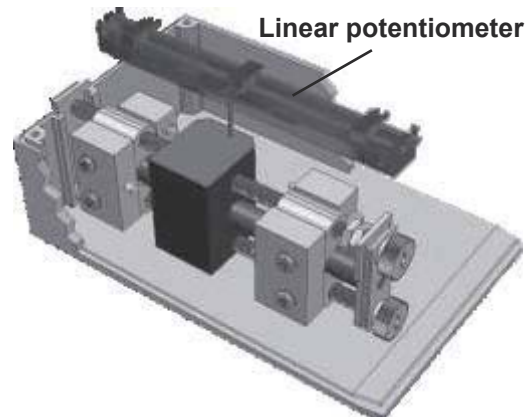
Limit switch version 1 (not MR6)

for applications with defined stops in both directions, protected by 2 safety switches, **with integrated power relays**



Limit switch version 2 (not MR6)

for applications with defined stops in both directions, protected by 2 safety switches, **without integrated power relays**.



Limit switch version 2P (not MR6)

for applications with defined stops in both directions, protected by 2 safety switches. **Additional potentiometer signal for positioning.**

Slip-on geared motor COMPACTA

6. Conditions of use



It is a condition of sale that Hein Lanz gear motors shall not be used for the movement of loads where by persons can be directly or indirectly endangered. The use of Compacta rotary actuators in equipment which is intended for the transport of passengers is only permissible after prior written consultation and the agreement of the manufacturer (Hein Lanz) or their representatives.

Don't use this drive in explosive environments. A void environmental temperatures below 0°C and above 60°C.

We refer users of gear motors to safety rules, regulations and laws governing the protection of staff working in the area of moving equipment. Protective guards or barriers shall be used.

Similarly-protective measures are required where suspended loads are involved.

7. Self-locking

Self-locking is affected by lead angle, surface quality, speed, lubrication and temperature. A distinction must be made between dynamic (from motion) and static (standstill) self-locking.

Shocks or vibrations can cancel out self-locking.

Similarly a number of factors associated with lubrication, running speed and loading can favour slip characteristics to such an extent that self-locking is counteracted.

This means that gearing which is self-locking in theory is no substitute for a brake or reverse lock. It is therefore impossible for us to accept warranty obligations in respect to self-locking. If safety is involved, a positive brake should be used.

8. Lifetime

The drive is maintenance-free due to lifetime lubrication. The lifetime of the drive depends on the application (e.g. torque, speed, number of cycles, ambient temperature and other environmental impacts).

Damaged drives must be opened and repaired by Hein Lanz, otherwise the warranty is canceled.

9. Options

- Internal limit switches (externally adjustable)
- Linear potentiometer
- Encoder
- Cooling fan or forced ventilation fan (for frequency inverter control) for type MS12
- Hand crank with electrical protection (for emergency operation)
- Spring actuated, electrically released motor brake (for precise positioning)
- Armature cone brake for Type MS 12
- Adjustable slip clutch for Type MS 12
- Paint finish
- Anti-corrosion treatment for rotor/stator
- Drainage holes for condensed water
- Stainless steel hollow shaft (for Type MS12 or MR30)
- Reinforced first stage gear for MS 12 and MR 30
(recommended for high duty cycle reverse drive applications)

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MR6



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3-phase motors - 3x230/400V-50Hz

Order code	Output speed n ₂ rpm	Motor speed n ₁ rpm	Motor output kW	Output torque Nm (30% duty cycle)	Transmission ratio	Self-locking	Max. limit switch range output rotation
CAC-MR6-3F22-1106	100	2700	0,22	10,5	27:1	So *	275
CAC-MR6-3E22-2206	80	2700	0,22	13	34:1	So *	275
CAC-MR6-3D22-3305	67	2700	0,22	15	40:1	So *	184
CAC-MR6-3C22-4405	54	2700	0,22	19	50:1	So *	184
CAC-MR6-3B22-5504	34	2700	0,22	26	80:1	So *	92
CAC-MR6-3A22-6604	27	2700	0,22	33	100:1	So *	92
CAC-MR6-3922-7713	17	2700	0,22	40	160:1	Ss *	46
CAC-MR6-3822-9813	14	2700	0,22	50	200:1	Ss *	46
CAC-MR6-3722-8922	12	2700	0,22	44	224:1	Sd *	33
CAC-MR6-3622-AA22	10	2700	0,22	55	280:1	Sd *	33
CAC-MR6-3511-B713	8	1300	0,15	60	160:1	Ss *	46
CAC-MR6-3411-B922	6	1300	0,15	60	224:1	Sd *	33
CAC-MR6-3311-BA22	4,8	1300	0,15	60	280:1	Sd *	33
CAC-MR6-3211-AB21	3,6	1300	0,15	55	360:1	Sd *	21
CAC-MR6-3111-AC21	2,9	1300	0,15	55	450:1	Sd *	21

Single phase motors - 1x230V-50Hz

Order code	Output speed n ₂ rpm	Motor speed n ₁ rpm	Motor output kW	Output torque Nm (15% duty cycle) **	Transmission ratio	Self-locking
CAC-MR6-1F22-1100	100	2700	0,09	6,0	27:1	So *
CAC-MR6-1E22-2200	80	2700	0,09	7,5	34:1	So *
CAC-MR6-1D22-3300	67	2700	0,09	8,5	40:1	So *
CAC-MR6-1C22-4400	54	2700	0,09	10,5	50:1	So *
CAC-MR6-1B22-5500	34	2700	0,09	14,5	80:1	So *
CAC-MR6-1A22-6600	27	2700	0,09	18,0	100:1	So *
CAC-MR6-1922-7710	17	2700	0,09	21,0	160:1	Ss *
CAC-MR6-1822-9810	14	2700	0,09	26,5	200:1	Ss *
CAC-MR6-1722-8920	12	2700	0,09	22,0	224:1	Sd *
CAC-MR6-1622-AA20	10	2700	0,09	27,5	280:1	Sd *
CAC-MR6-1511-B710	8	1300	0,07	33,5	160:1	Ss *
CAC-MR6-1411-C920	6	1300	0,07	35,0	224:1	Sd *
CAC-MR6-1311-DA20	4,8	1300	0,07	43,5	280:1	Sd *
CAC-MR6-1211-EB20	3,6	1300	0,07	54,0	360:1	Sd *
CAC-MR6-1111-FC20	2,9	1300	0,07	55,0	450:1	Sd *

24V DC Permanentmagnet-Motor

Order code	Output speed n ₂ rpm	Output torque Nm	Transmission ratio	Self-locking
CDC-MR6-0C00-1100	65	7	27 : 1	So *
CDC-MR6-0B00-2200	51,5	8,75	34 : 1	So *
CDC-MR6-0A00-3300	44	10	40 : 1	So *
CDC-MR6-0900-4400	35	12	50 : 1	So *
CDC-MR6-0800-5500	22	16,5	80 : 1	So *
CDC-MR6-0700-6600	17,5	20,5	100 : 1	So *
CDC-MR6-0600-7700	11	24,5	160 : 1	So *
CDC-MR6-0500-8810	9	30,5	200 : 1	Ss *
CDC-MR6-0400-9920	8	25	224 : 1	Sd *
CDC-MR6-0300-AA20	6	31	280 : 1	Sd *
CDC-MR6-0200-BB20	5	38,5	360 : 1	Sd *
CDC-MR6-0100-CC20	4	47,5	450 : 1	Sd *

P = 0,12 kW
I_N = 10,5 A
20% Duty cycle

The output speed of Compacta gear motors with DC motors varies with the output torque.

Additional output table information:

*So = No self-locking
Ss = Static self-locking
Sd = Dynamic self-locking

** The stated single-phase torques are operational torques. The starting torque, depending on application, is between 30% and 60% of the stated catalog specification. Please contact the manufacturer in case max. torque is required.

The gear motor can be overloaded by 50% for brief periods. Single-phase AC and DC motors may stall.

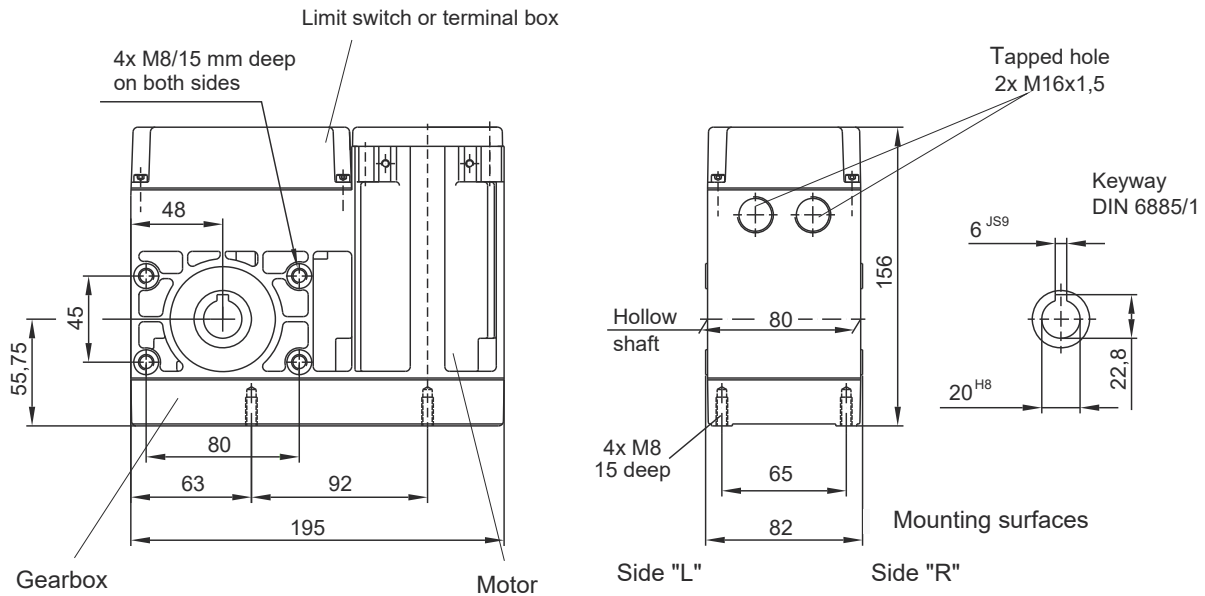
Please contact the manufacturer in case of the following operating conditions:

- Temperatures below 0°C (single-phase AC and DC motors: below 10°C)
- Temperatures above 40°C
- Strong vibrations

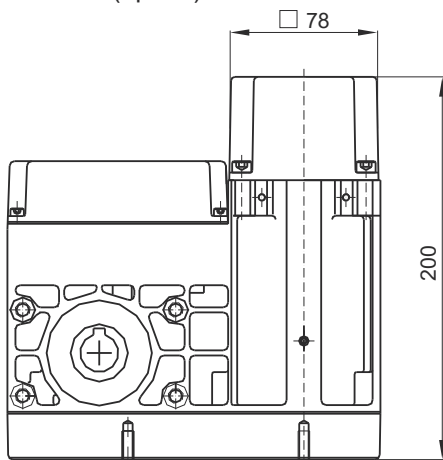
Slip-on geared motor COMPACTA

Dimensions

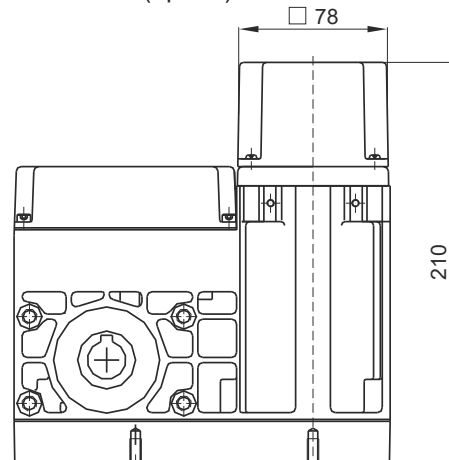
Standard drive with 3-phase and single-phase motors



DC-motor (option)

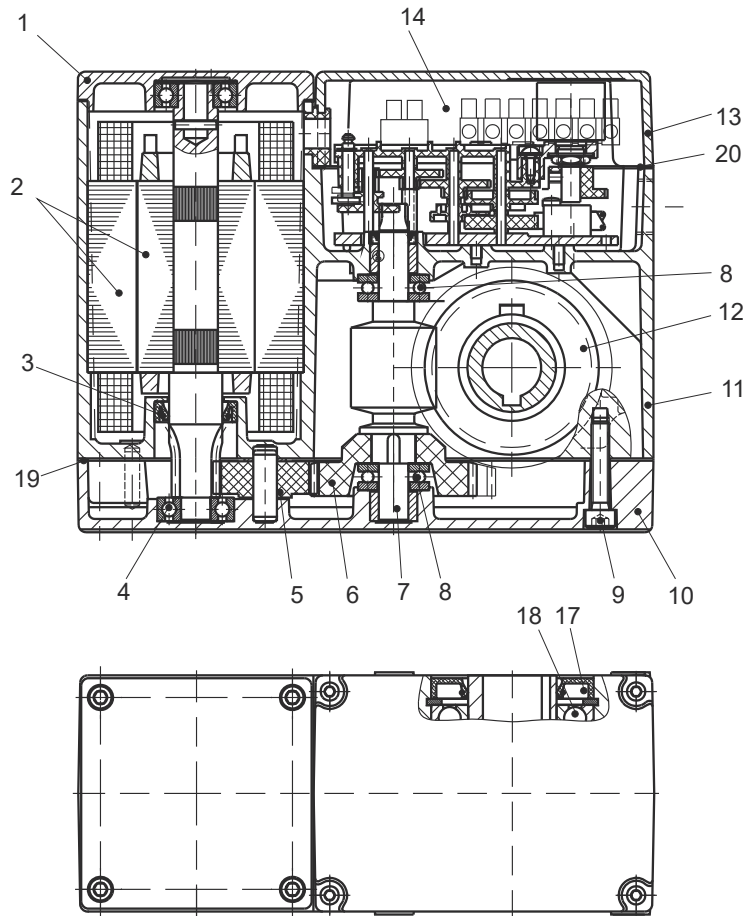


Motor brake (option)



Slip-on geared motor COMPACTA

Spare parts



Spare part list

Item	Designation	Article No.
1	Motor cover	6-07-320.01
2	Rotor + stator	Type No.
3	Radial shaft seal	00200101828070
4	Deep-groove ball bearing	00300100600030
5	Idler gear	6-07-01.05
6	Spur gear	6-07-50.01
7	Worm shaft	Type No.
8	Axial bearing	00300055110010
9	Screw	00010200603021
10	Gearbox cover	6-07-01.02
11	Gearbox case	6-07-01.01
12	Worm gear	Type No.
13	Limit switch cover	6-07-01.03
14	Limit switches compl.	Type No.
17	Radial shaft seal	00200103055074
18	Deep-groove-ball bearing	00300101600610
19	Cover seal	6-07-01.06
20	Flat seal	6-07-01.07

Spare parts can only be supplied if the serial number is stated

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MS 12



Slip-on geared motor COMPACTA

3-phase motors - 3x230/400V-50Hz

Order code	Output speed n ₂ rpm	Motor speed n ₁ rpm	Motor output kW **			Output torque Nm **			Transmission ratio	Self- locking	Max. limit switch range; output rotation
			40%	60%	100%	40%	60%	100%			
CAC-MS12-3N33-1101	193	2750	0,4	0,3	0,3	16	12	12	14,2:1	So *	275
CAC-MS12-3M33-2201	137,5	2750	0,4	0,3	0,3	21	15,7	15,7	20:1	So *	275
CAC-MS12-3L33-3301	94,8	2750	0,4	0,3	0,3	30	22,5	22,5	29:1	So *	275
CAC-MS12-3K33-4401	68	2750	0,4	0,3	0,3	39,5	29,5	29,5	40,5:1	So *	275
CAC-MS12-3J33-5501	61	2750	0,4	0,3	0,3	44	33	33	45:1	So *	275
CAC-MS12-3H22-6301	47,6	1380	0,3	0,23	0,23	45,5	34	34	29:1	So *	275
CAC-MS12-3G33-5601	43,6	2750	0,4	0,3	0,3	44	33	33	63:1	So *	275
CAC-MS12-3F33-7701	36,7	2750	0,4	0,3	0,3	47	35	35	75:1	So *	275
CAC-MS12-3E33-8811	32,7	2750	0,4	0,3	0,3	59	44	44	84:1	Ss *	275
CAC-MS12-3D33-9911	30,5	2750	0,4	0,3	0,3	63	47	47	90:1	Ss *	275
CAC-MS12-3C33-BA11	24,1	2750	0,4	0,3	0,3	72	54	54	114:1	Ss *	275
CAC-MS12-3B22-A601	21,9	1380	0,3	0,23	0,23	66	49	49	63:1	So *	275
CAC-MS12-3A33-CB21	18,3	2750	0,4	0,3	0,3	84	63	63	150:1	Sd *	275
CAC-MS12-3922-D811	16,4	1380	0,3	0,23	0,23	88	66	66	84:1	Ss *	275
CAC-MS12-3822-F911	15,3	1380	0,3	0,23	0,23	94,5	71	71	90:1	Ss *	275
CAC-MS12-3722-HA11	12,1	1380	0,3	0,23	0,23	107,5	80,5	80,5	114:1	Ss *	275
CAC-MS12-3622-JB21	9,2	1380	0,3	0,23	0,23	126	94,5	94,5	150:1	Sd *	275
CAC-MS12-3522-KC21	7,7	1380	0,3	0,23	0,23	132	99	99	180:1	Sd *	275
CAC-MS12-3422-LD21	6,1	1380	0,3	0,23	0,23	142	106,5	106,5	225:1	Sd *	275
CAC-MS12-3311-DB21	4,5	680	0,12	0,09	0,09	88	66	-	150:1	Sd *	275
CAC-MS12-3211-EC21	3,8	680	0,12	0,09	0,09	92	68	-	180:1	Sd *	275
CAC-MS12-3111-GD21	3	680	0,12	0,09	0,09	100	75	-	225:1	Sd *	275

Single-phase motors - 1x230V-50Hz

Order code	Output speed n ₂ rpm	Motor speed n ₁ rpm	Motor output kW	Output torque Nm (20% ED) ***	Transmission ratio	Self- locking
CAC-MS12-1K22-1100	193,0	2750	0,28	10,0	14,2:1	So *
CAC-MS12-1J22-2200	137,5	2750	0,28	13,0	20,0:1	So *
CAC-MS12-1H22-3300	94,8	2750	0,28	18,0	29,0:1	So *
CAC-MS12-1G22-4400	68,0	2750	0,28	23,9	40,5:1	So *
CAC-MS12-1F22-5500	61,0	2750	0,28	26,0	45,0:1	So *
CAC-MS12-1E11-6300	47,6	1380	0,25	27,0	29,0:1	So *
CAC-MS12-1D22-5600	43,6	2750	0,28	26,0	63,0:1	So *
CAC-MS12-1C22-7700	36,7	2750	0,28	28,0	75,0:1	So *
CAC-MS12-1B22-8810	32,7	2750	0,28	35,0	84,0:1	Ss *
CAC-MS12-1A22-9910	30,5	2750	0,28	38,0	90,0:1	Ss *
CAC-MS12-1922-BA10	24,1	2750	0,28	43,0	114,0:1	Ss *
CAC-MS12-1811-A600	21,9	1380	0,25	40,0	63,0:1	So *
CAC-MS12-1722-CB20	18,3	2750	0,28	49,8	150,0:1	Sd *
CAC-MS12-1611-D810	16,4	1380	0,25	53,0	84,0:1	Ss *
CAC-MS12-1511-E910	15,3	1380	0,25	56,9	90,0:1	Ss *
CAC-MS12-1411-FA10	12,1	1380	0,25	65,0	114,0:1	Ss *
CAC-MS12-1311-GB20	9,2	1380	0,25	75,9	150,0:1	Sd *
CAC-MS12-1211-HC20	7,7	1380	0,25	79,0	180,0:1	Sd *
CAC-MS12-1111-JD20	6,1	1380	0,25	84,9	225,0:1	Sd *

Additional output table information:

*So = No self-locking
Sd = Dynamic self-locking
Ss = Static self-locking

** At 100% duty cycle (continuous operation) cooling is always required. With cooling, motors rated with 60% duty can be operated at 100% duty.

*** The stated single-phase torques are operational torques. The starting torque, depending on application, is between 30% and 60% of the stated catalog specification. Please contact the manufacturer in case max. torque is required.

24V DC Permanentmagnet-Motor

	Output speed n ₂ rpm	Output torque Nm	Transmission ratio	Self-locking
CDC-MS12-0D00-1100	140	16	14,2 : 1	So *
CDC-MS12-0C00-2200	100	21	20 : 1	So *
CDC-MS12-0B00-3300	69	30	29 : 1	So *
CDC-MS12-0A00-4400	49	40	40,5 : 1	So *
CDC-MS12-0900-5500	44	45	45 : 1	So *
CDC-MS12-0800-5600	32	45	63 : 1	So *
CDC-MS12-0700-6700	27	48	75 : 1	So *
CDC-MS12-0600-7810	24	60	84 : 1	Ss *
CDC-MS12-0500-8910	22	65	90 : 1	Ss *
CDC-MS12-0400-9A10	17,5	73	114 : 1	Ss *
CDC-MS12-0300-AB20	13	88	150 : 1	Sd *
CDC-MS12-0200-BC20	11	91	180 : 1	Sd *
CDC-MS12-0100-CD20	8,9	96	225 : 1	Sd *

P = 0,3 kW IN = 25 A 30% Duty cycle

The gear motor can be overloaded by 50% for brief periods. Single-phase AC and DC motors may stall.

Please contact the manufacturer in case of the following operating conditions:

- Temperatures below 0°C (single-phase AC and DC motors: below 10°C)
- Temperatures above 40°C
- Strong vibrations

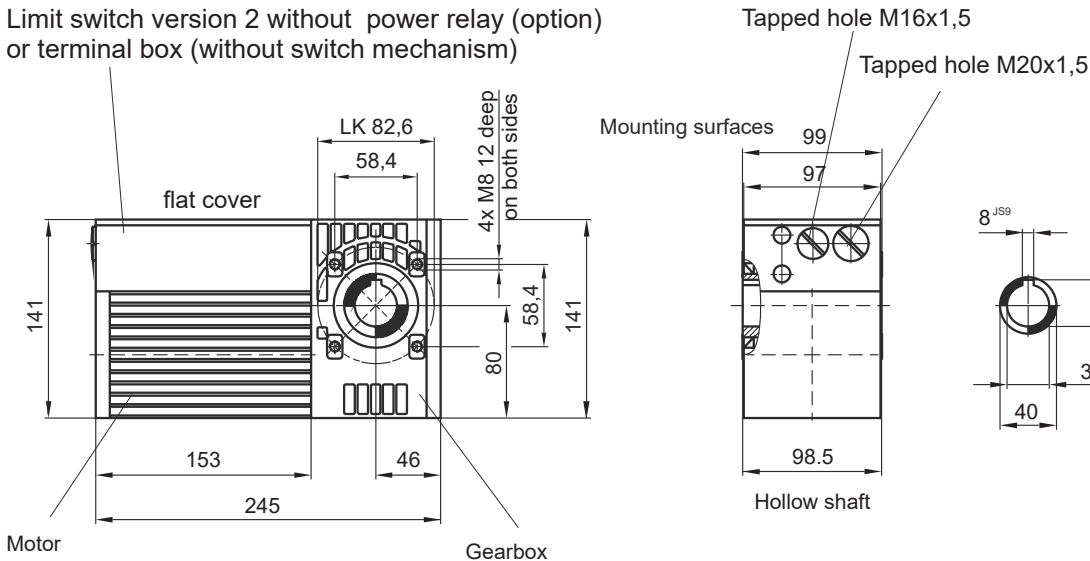
The output speed of Compacta gear motors with DC motors varies with the output torque.

Slip-on geared motor COMPACTA

Dimensions

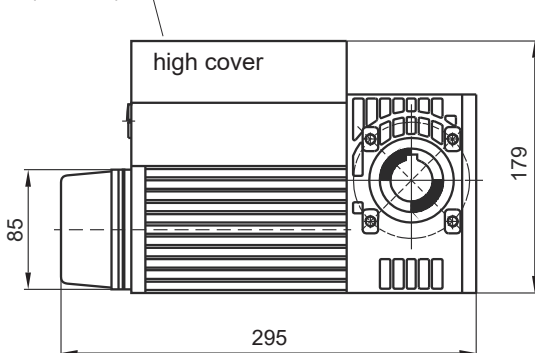
Standard drive with 3-phase or single-phase motor

Limit switch version 2 without power relay (option)
or terminal box (without switch mechanism)

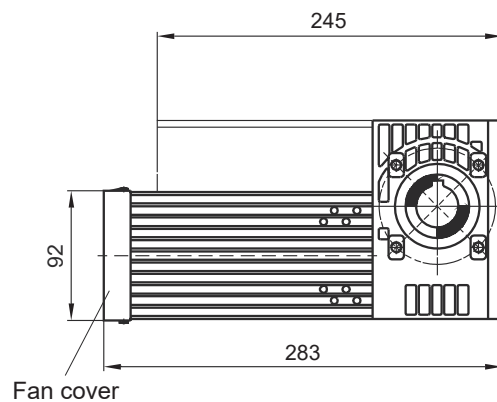


with motor brake (option)

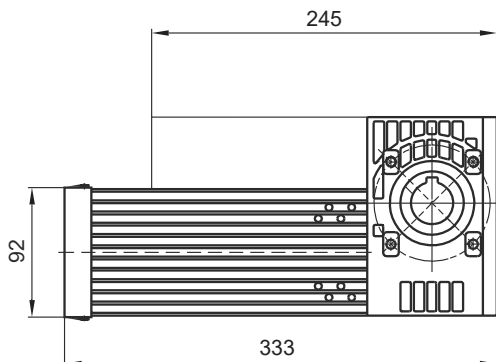
Limit switch version 1 with power relays, (options)



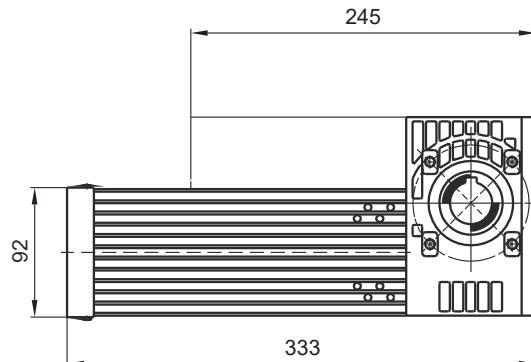
with rotor fan (option)



with rotor fan and motor brake or just motorized fan (option)



with motor brake and motorized fan (option)

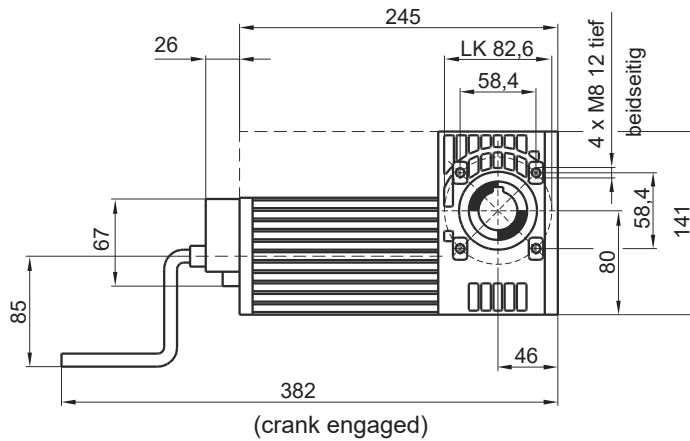


Some options may be combined

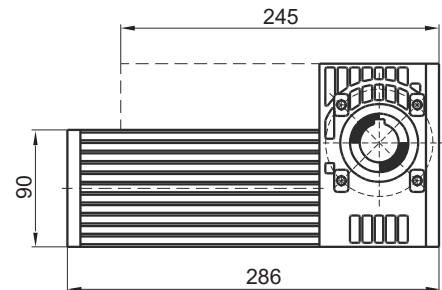
Slip-on geared motor COMPACTA

Dimensions

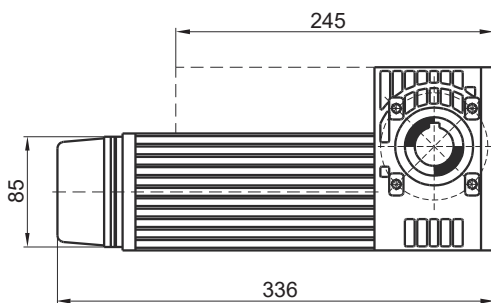
Hand crank with elec. interlock (option)
(removable)



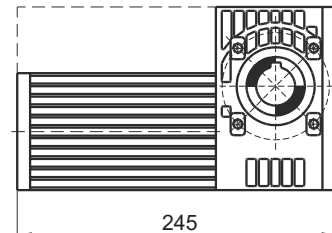
with DC motor
(option)



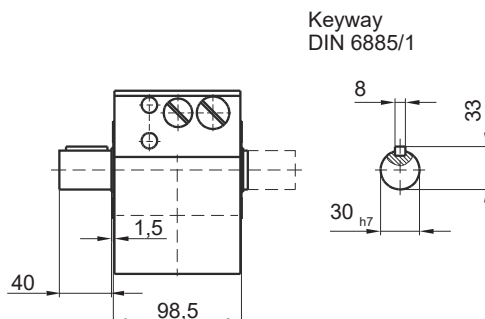
with DC motor and motor brake
(option)



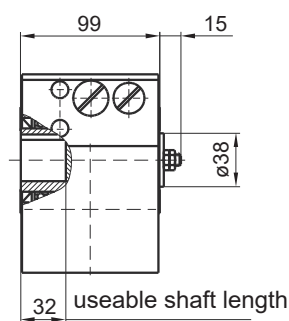
with integrated cone brake
(only with single- and 3-phase AC motor)
(option)



with stub shaft (option)
(left or right)



with slip clutch
(option)

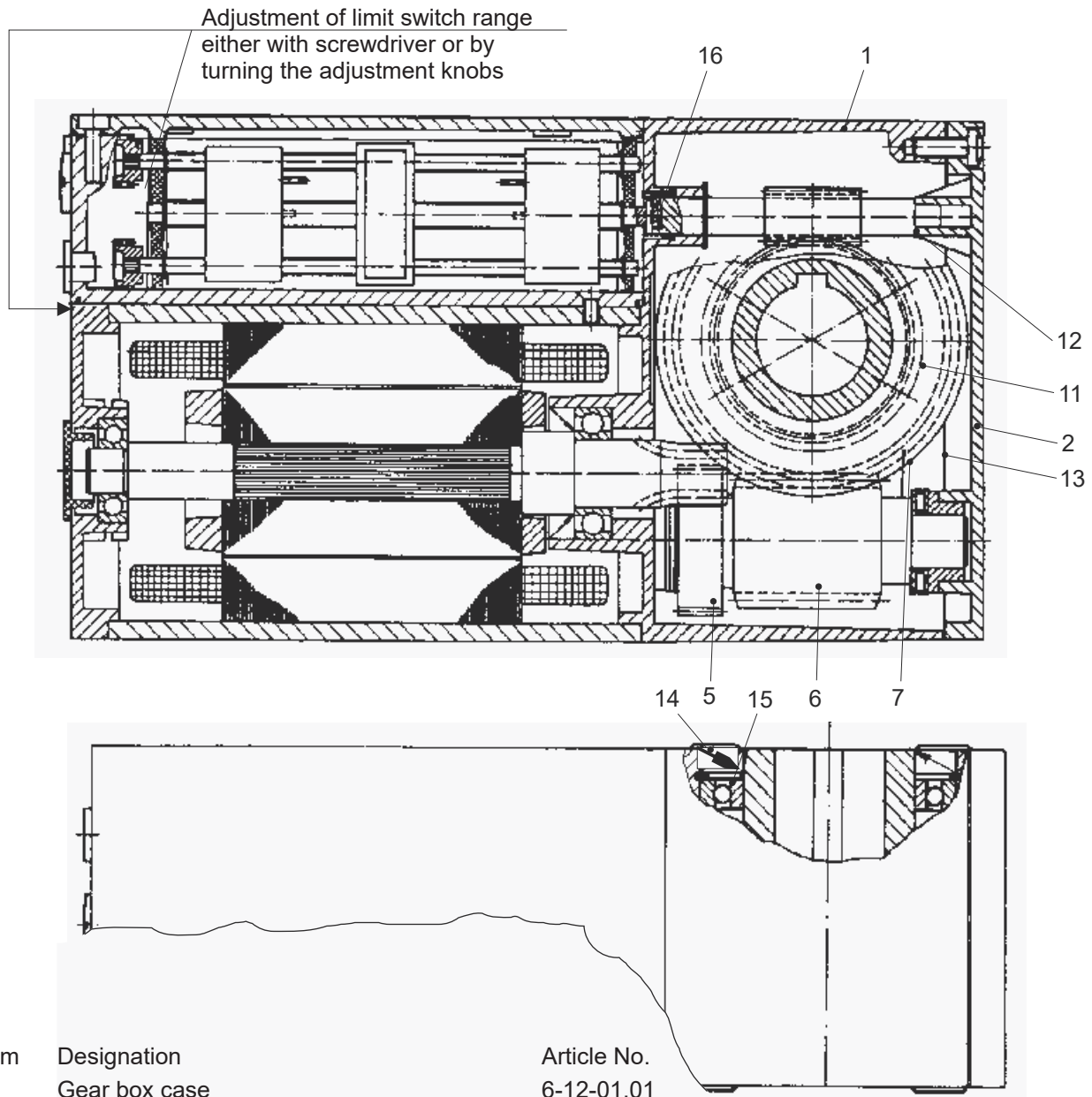


Adjustment of
slipping torque
up to max. 90 Nm

Some options may be combined

Slip-on geared motor COMPACTA

Spare parts gearbox



Item	Designation	Article No.
1	Gear box case	6-12-01.01
2	Gear box cover	6-12-01.02
5	1st stage gear	Serial No.
6	Worm shaft A53	Serial No.
7	Worm wheel A53	Serial No.
11	Spur wheel	Serial No.
12	Control shaft	Serial No.
13	Cover seal	6-12-01.03A
14	Radial seal A40x68x7	00200104068079
15	Deep-groove ball bearing 16008	00300101600810
16	Coupling	6-12-36.03

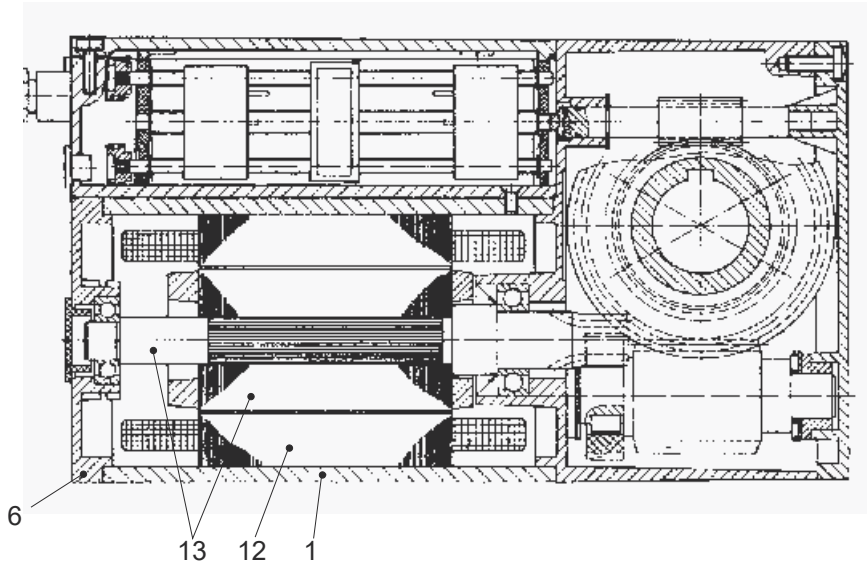
Spare parts can only be supplied if the serial number is stated

Some options may be combined

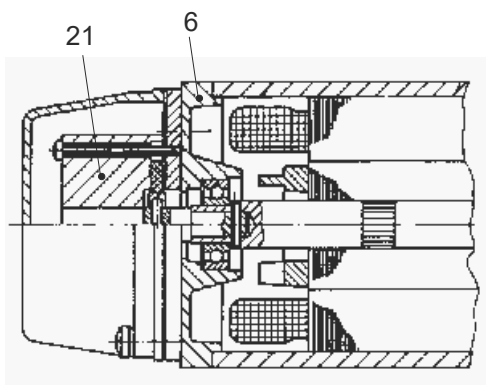
Slip-on geared motor COMPACTA

Spare parts motor

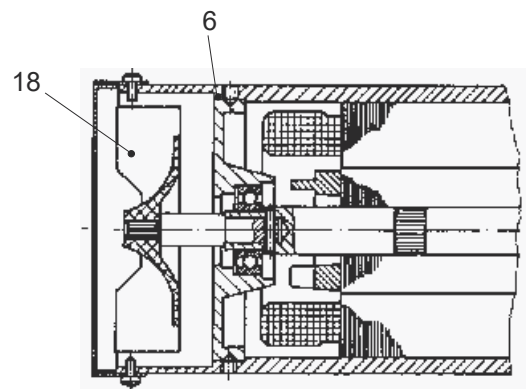
Motor - Standard version (without fan)



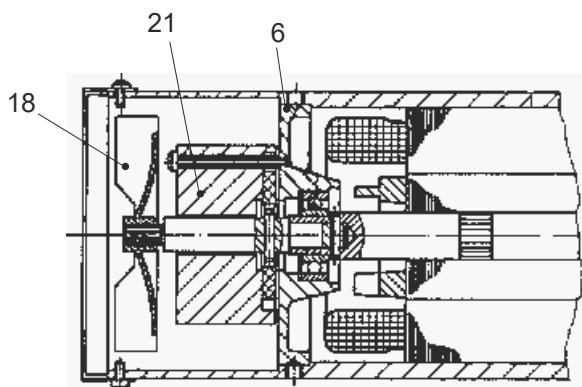
Motor with brake
(without fan)



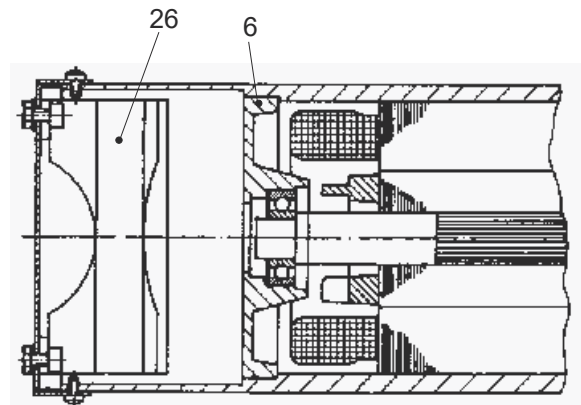
Motor with rotor fan



Motor with brake and rotor fan



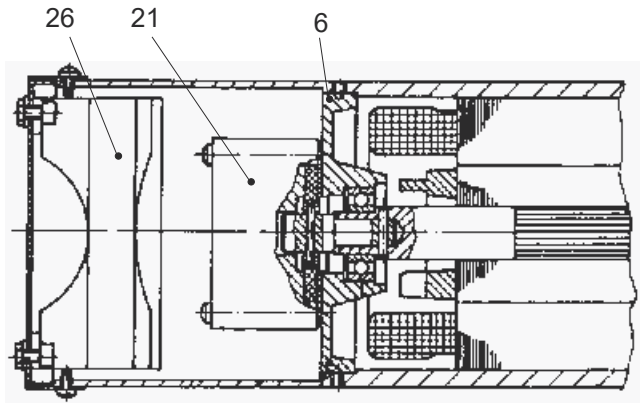
Motor with motorized fan



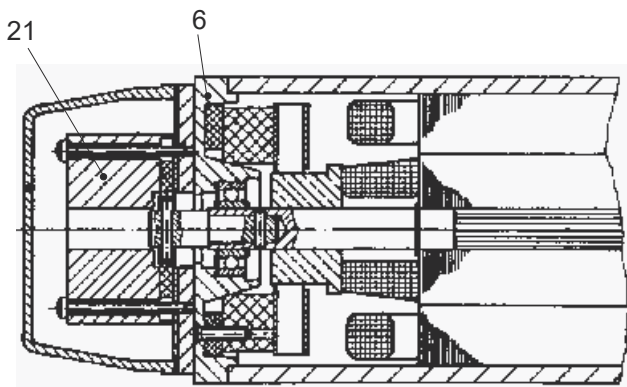
Slip-on geared motor COMPACTA

Spare parts motor

Motor with brake and motorized fan



DC motor (shunt wound) with brake



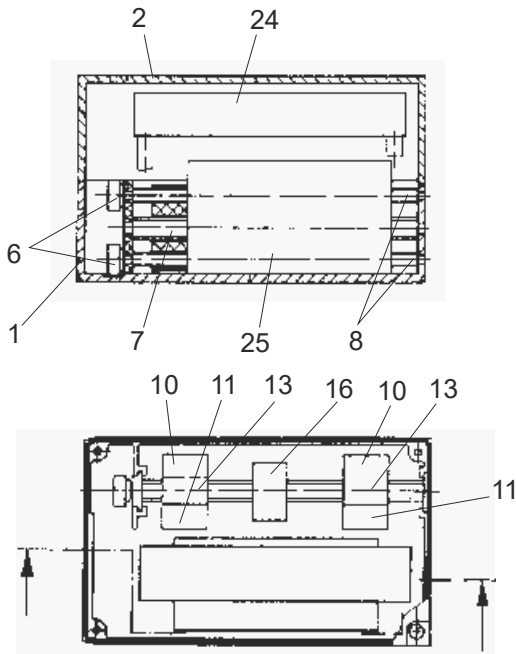
Item	Designation	Article No.
1	Motor casing N (standard motor)	Serial-No.
6	Motor cover	Serial-No.
12	Stator	Serial-No.
13	Rotor cpl.	Serial-No.
18	Fan blade	6-10-119.03
21	Motor brake	Serial-No.
26	Motorized fan	02901100007000

Spare parts can only be supplied if the serial number is stated

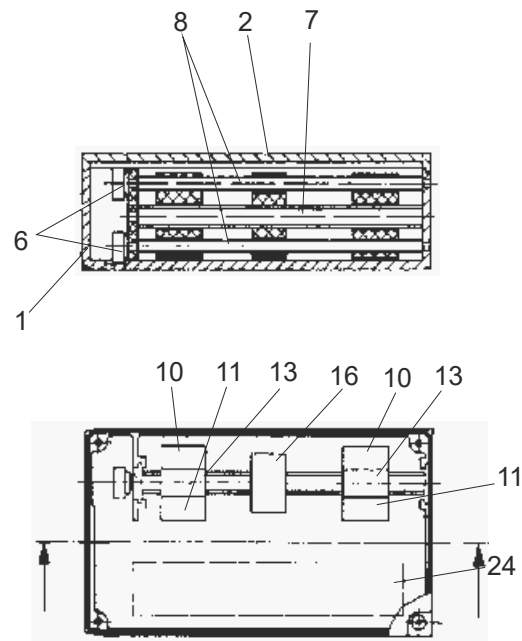
Slip-on geared motor COMPACTA

Spare parts limit switches

Version 1



Version 2



Item	Designation	Article-No.
1	Limit switch housing	Serial-Nr
2	Cover	Serial-Nr
6	Adjustment knob	6-10-36.14
7	Control spindle	Serial-Nr
8	Adjustment spindle	6-10-36.13
9	Adjustment spindle	6-10-600.13
10	Safety limit switch S4 / S5	02450100000250
11	Limit switch S6 / S7	02450100000050
13	Switch holder	6-10-36.21
16	Switching nut	Serial-Nr
24	Terminal strip	02000102000000
25	Reversing contactor	Serial-Nr.
no No.	Clutch	6-12-36.03

Spare parts can only be supplied if the serial number is stated

Slip-on geared motor COMPACTA

MR30



Slip-on geared motor COMPACTA

3-phase motors - 3x230/400V-50Hz

Order code	Output speed n ₂ rpm	Motor speed n ₁ rpm	Motor output	Output torque	Transmission ratio	Self- locking	Limit switch	
			kW duty cycle 60%	Nm duty cycle 60%			range Output rotation	
CAC-MR30-3H33-1108	123,4	2800	1,1	60	22,7:1	So *	normal	lang
CAC-MR30-3G33-2207	61,6	2800	1,1	112	45,4:1	So *	130	215
CAC-MR30-3F33-6306	39	2800	1,1	165	71,8:1	So *	85	135
CAC-MR30-3E22-3207	30,8	1400	0,6	125	45,4:1	So *	130	215
CAC-MR30-3D33-9405	28,4	2800	1,1	187	98,3:1	So *	60	100
CAC-MR30-3C33-B514	21,8	2800	1,1	220	128,5:1	Ss *	47	77
CAC-MR30-3B22-8306	19,5	1400	0,6	180	71,8:1	So *	85	135
CAC-MR30-3A33-C613	15,4	2800	1,1	240	181,4:1	Ss *	32	55
CAC-MR30-3922-A405	14,2	1400	0,6	206	98,3:1	So *	60	100
CAC-MR30-3833-F722	11,8	2800	1,1	270	238,1:1	Sd *	25	42
CAC-MR30-3733-D821	10,6	2800	1,1	250	264,6:1	Sd *	23	38
CAC-MR30-3622-E613	7,7	1400	0,6	267	181,4:1	Ss *	32	55
CAC-MR30-3522-H722	5,9	1400	0,6	300	238,1:1	Sd *	25	42
CAC-MR30-3422-G821	5,3	1400	0,6	278	264,6:1	Sd *	23	38
CAC-MR30-3311-4613	3,8	700	0,15 (40%)	148 (40%)	181,4:1	Ss *	32	55
CAC-MR30-3211-7722	2,9	700	0,15 (40%)	170 (40%)	238,1:1	Sd *	25	42
CAC-MR30-3111-5821	2,6	700	0,15 (40%)	160 (40%)	264,6:1	Sd *	23	38

Single-phase motors - 1x230V-50Hz

Order code	Output speed n ₂ rpm	Motor speed n ₁ rpm	Motor output kW	Output torque Nm (40% duty cycle) **	Transmission ratio	Self- locking
CAC-MR30-1F22-1100	123,4	2800	0,66	36,0	22,7:1	So *
CAC-MR30-1E22-2200	61,6	2800	0,66	67,2	45,4:1	So *
CAC-MR30-1D22-4300	39,0	2800	0,66	99,0	71,8:1	So *
CAC-MR30-1C11-3200	30,8	1400	0,36	73,3	45,4:1	So *
CAC-MR30-1B22-6400	28,4	2800	0,66	112,2	98,3:1	So *
CAC-MR30-1A22-7510	21,8	2800	0,66	132,0	128,5:1	Ss *
CAC-MR30-1911-5300	19,5	1400	0,36	108,0	71,8:1	So *
CAC-MR30-1822-8610	15,4	2800	0,66	144,0	181,4:1	Ss *
CAC-MR30-1711-8400	14,1	1400	0,36	144,0	98,3:1	So *
CAC-MR30-1622-B720	11,8	2800	0,66	162,0	238,1:1	Sd *
CAC-MR30-1511-8510	10,9	1400	0,36	144,0	128,5:1	Ss *
CAC-MR30-1422-9820	10,6	2800	0,66	150,0	264,6:1	Sd *
CAC-MR30-1311-A610	7,7	1400	0,36	157,1	181,4:1	Ss *
CAC-MR30-1211-D720	5,9	1400	0,36	176,7	238,1:1	Sd *
CAC-MR30-1111-C820	5,3	1400	0,36	163,4	264,6:1	Sd *

24V DC shunt-wound motor

Order code	Output speed n ₂ rpm	Output torque Nm	Transmission ratio	Self-locking
CDC-MR30-0800-1100	66	52	22,7 : 1	So *
CDC-MR30-0700-2200	33	97	45,4 : 1	So *
CDC-MR30-0600-3300	21	141	71,8 : 1	So *
CDC-MR30-0500-4400	15	162	98,3 : 1	So *
CDC-MR30-0400-5510	11,5	190	128,5 : 1	Ss *
CDC-MR30-0300-7610	8	205	181,4 : 1	Ss *
CDC-MR30-0200-8720	6,5	220	238,1 : 1	Sd *
CDC-MR30-0100-6820	5,5	200	264,6 : 1	Sd *

Additional output table information:

*So = No self-locking
 Ss = Static self-locking
 Sd = Dynamic self-locking

** The stated single-phase torques are operational torques. The starting torque, depending on application, is between 30% and 60% of the stated catalog specification. Please contact the manufacturer in case max. torque is required.

P = 0,5 kW
 I_N = 30 A
 40% duty cycle

The output speed of Compacta gear motors with DC motors varies with the output torque.

The gear motor can be overloaded by 50% for brief periods. Single-phase AC and DC motors may stall.

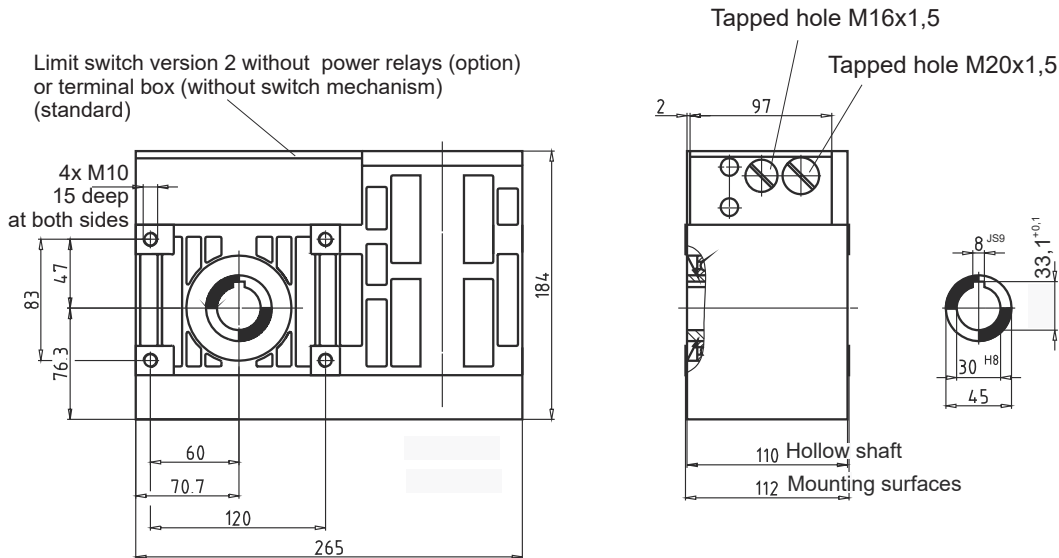
Please contact the manufacturer in case of the following operating conditions:

- Temperatures below 0°C (single-phase AC and DC motors: below 10°C)
- Temperatures above 40°C
- Strong vibrations

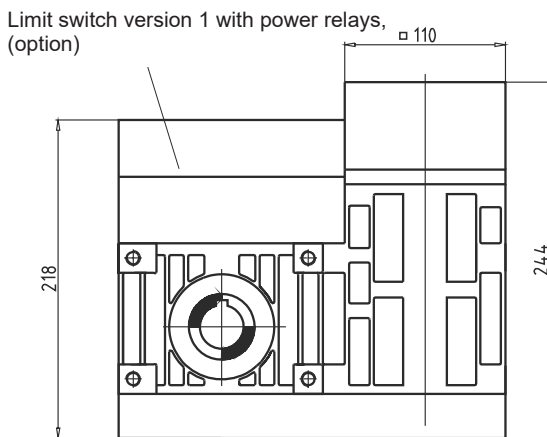
Slip-on geared motor COMPACTA

Dimensions

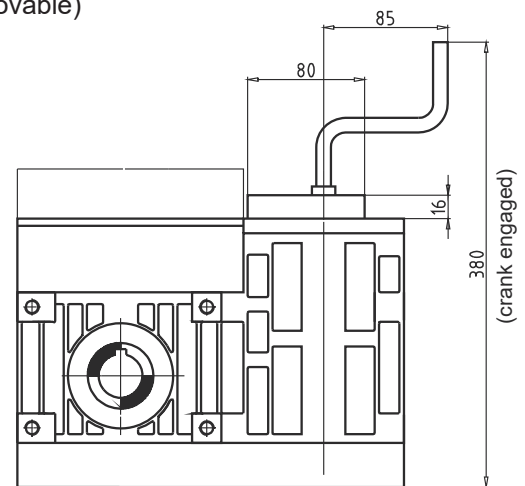
Standard drive with 3-phase or single-phase AC motor



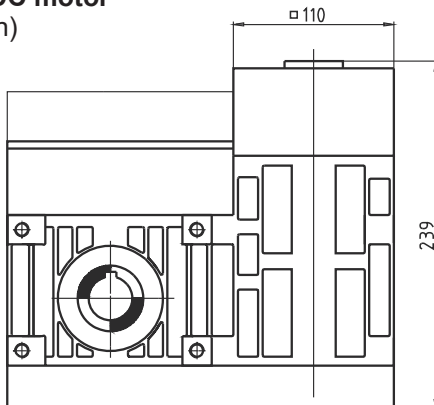
with motor brake (option)



Hand crank with elec. interlock (option) (removable)



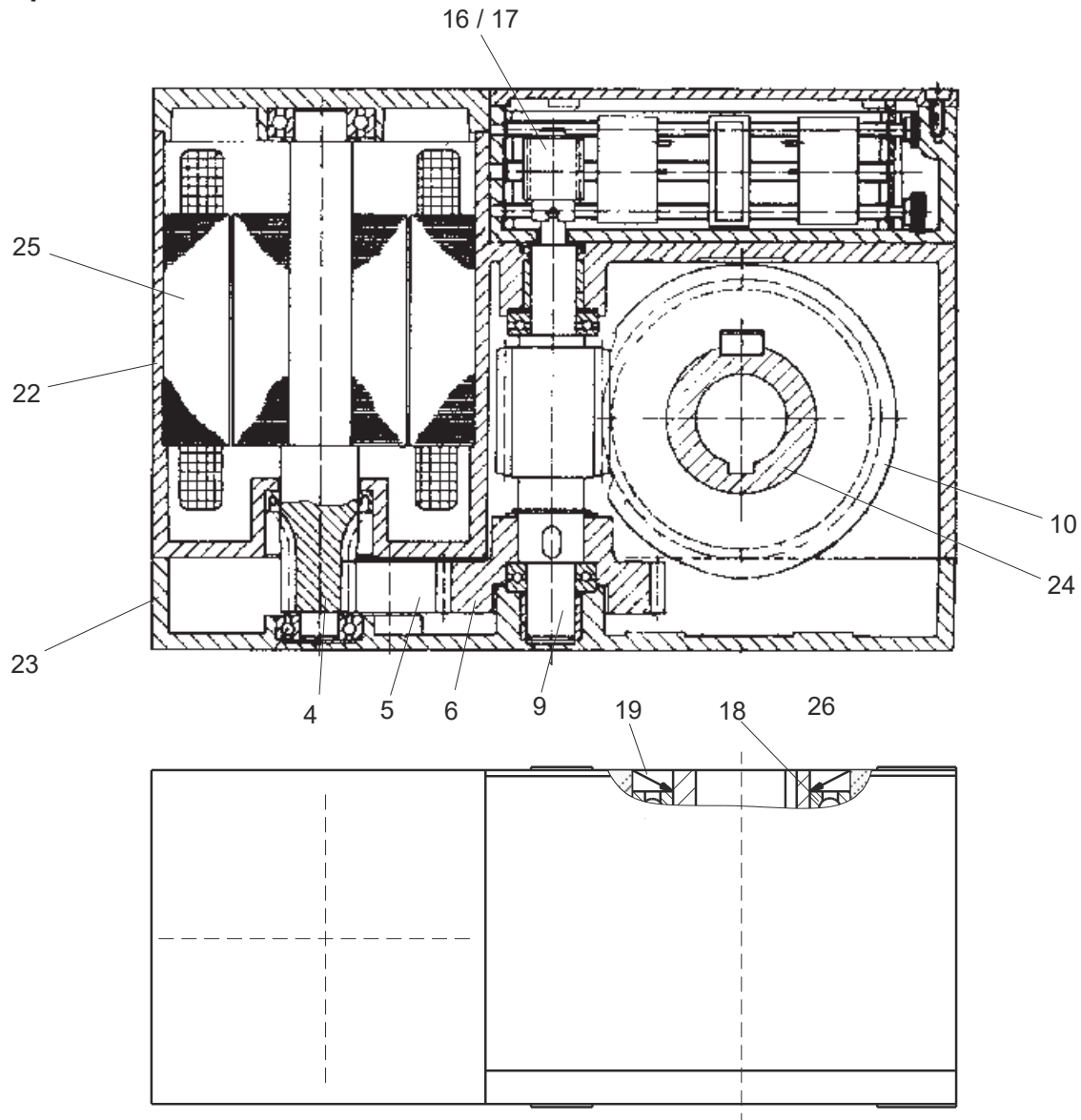
with DC motor (option)



Some options may be combined

Slip-on geared motor COMPACTA

Spare parts



Item	Designation	Article No.
4	Rotor shaft complete	Serial No.
5	Idler gear	6-40-50.14
6	Spur gear	6-40-50.16
9	Worm shaft A63	Serial No.
10	Worm wheel A63	Serial No.
16	Control worm	Serial No.
(17)	Helical gear	Serial No.
18	Deep-groove ball bearing	00300101600910
19	Radial shaft seal	00200104575102
22	Gearbox case	6-40-50.01
23	Gearbox cover	6-40-70.01
24	Hollow shaft	6-40-101.01
25	Stator	Serial No.
26	Flat seal	6-40-50.02A

Spare parts can only be supplied if the serial number is stated

Slip-on geared motor COMPACTA

AG160



Slip-on geared motor COMPACTA

3-phase motors - 3x230/400V-50Hz

Order code	Output speed n ₂ rpm	Motor speed n ₁ rpm	Motor output kW	Output torque Nm	Transmission ratio	Self-locking	Limit switch range Output rotation
		ED 60%		ED 60%			
CAC-AG160-3722-1101	8,30	2800	1,10	720	339 : 1	So	45
CAC-AG160-3622-2201	5,70	2800	1,10	960	490 : 1	So	45
CAC-AG160-3522-4301	3,70	2800	1,10	1400	764 : 1	So	45
CAC-AG160-3411-3201	2,90	1400	0,60	1000	490 : 1	So	45
CAC-AG160-3311-5301	1,80	1400	0,60	1530	764 : 1	So	45
CAC-AG160-3222-6421	0,90	2800	1,10	1600	3111 : 1	Sd	45
CAC-AG160-3111-6421	0,45	1400	0,60	1600	3111 : 1	Sd	45

Additional output table information:

*So = No self-locking
 Ss = Static self-locking
 Sd = Dynamic self-locking

The gear motor can be overloaded by 50% for brief periods.

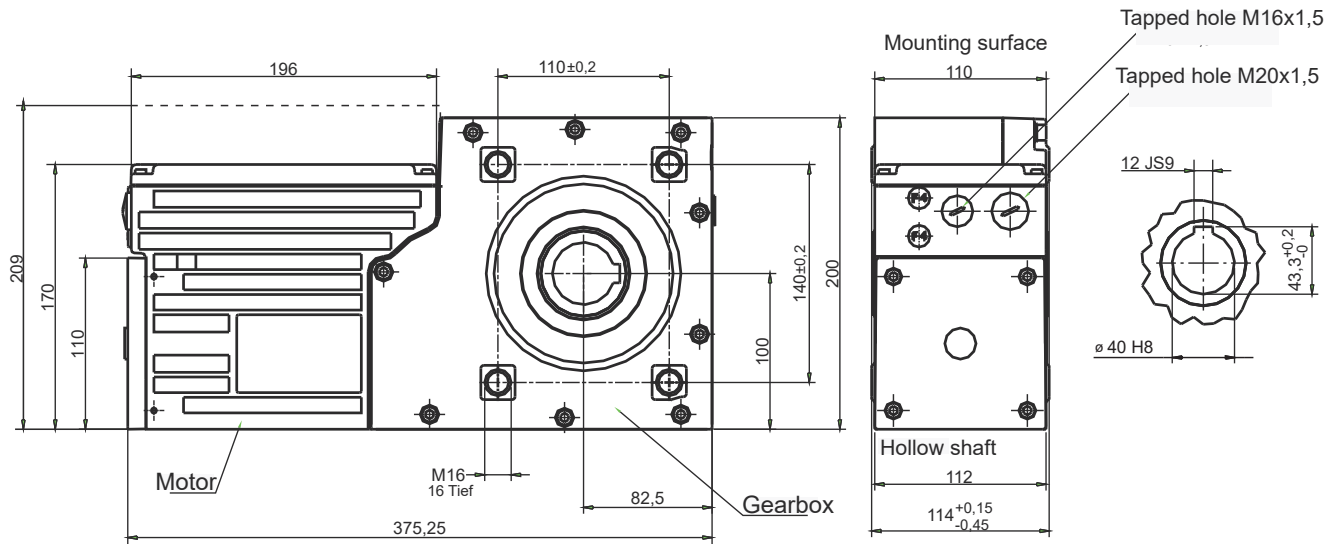
Please contact the manufacturer in case of the following operating conditions:

- Temperatures below 0°C
- Temperatures above 40°C
- Strong vibrations

Slip-on geared motor COMPACTA

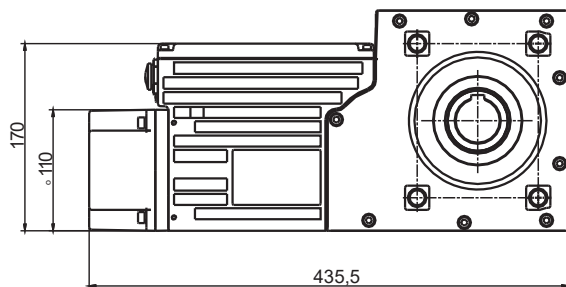
Dimensions

Standard drive with 3-phase motor

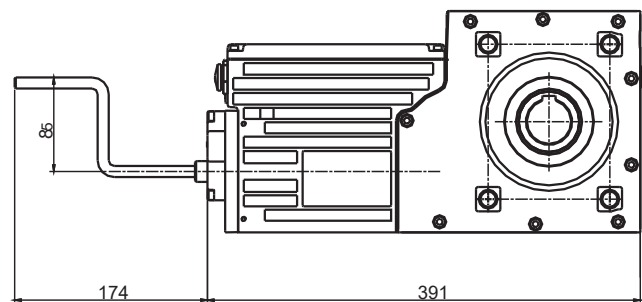


with solenoid brake (option)

Limit switch version 2 without power relays (option)
 or terminal box (without switch mechanism)
 (Standard)



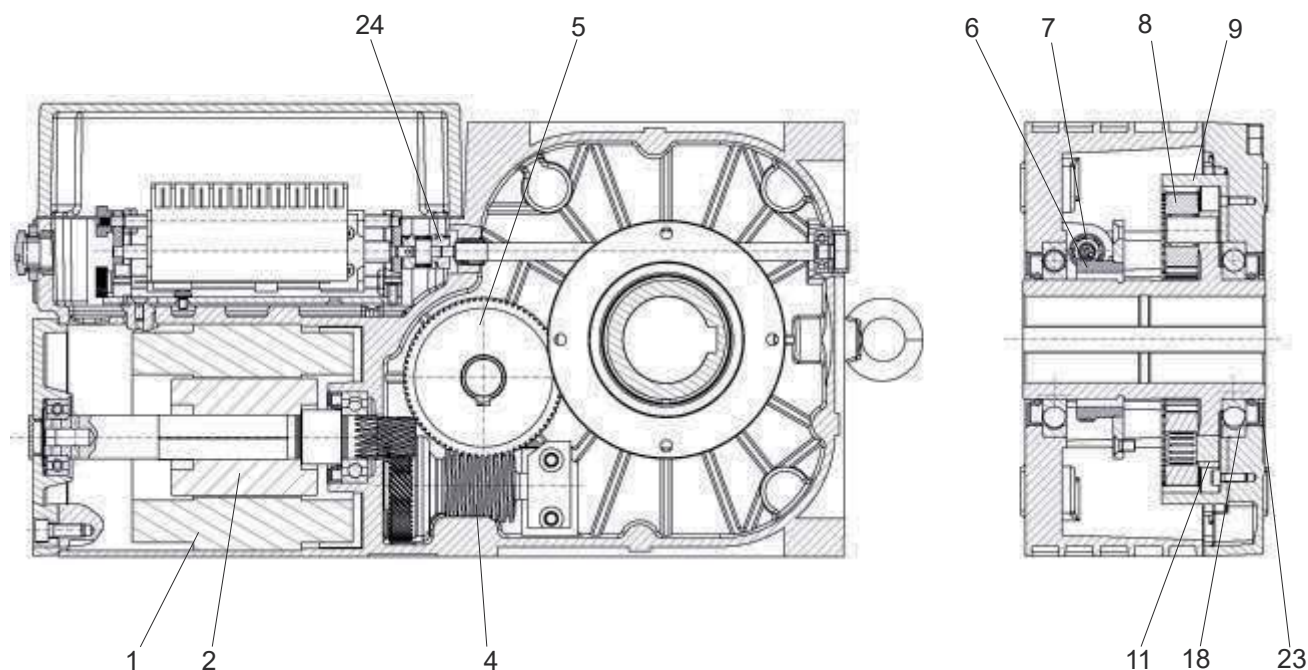
Hand crank with elec. interlock (option) (removable)



Some options may be combined

Slip-on geared motor COMPACTA

Spare parts



Item	Designation	Article No.
1	Stator	Serial No.
2	Rotor shaft complete	Serial No.
4	Worm shaft	Serial No.
5	Worm wheel	Serial No.
6	Control wheel	Serial No.
7	Control shaft	Serial No.
8	Planetary gear	6-160-01.06
9	Crown gear	6-160-01.03
11	Carrier disk	6-160-01.04
18	Deep-groove ball bearing	00300101601010
23	Radial shaft seal	00200105072084
24	Clutch	02870600008000

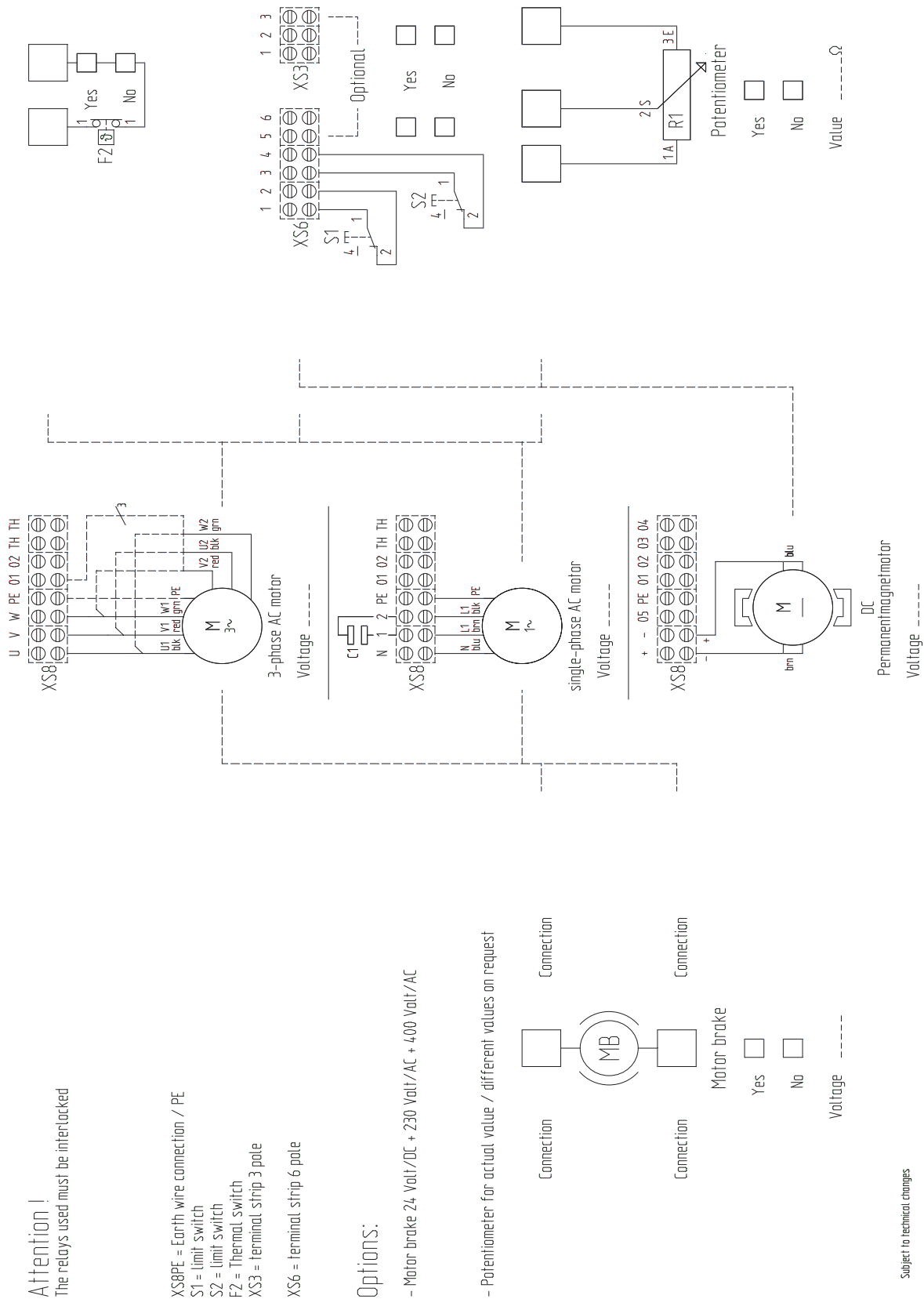
Spare parts can only be supplied if the serial number is stated

Slip-on geared motor COMPACTA

Circuit diagrams

Slip-on geared motor COMPACTA

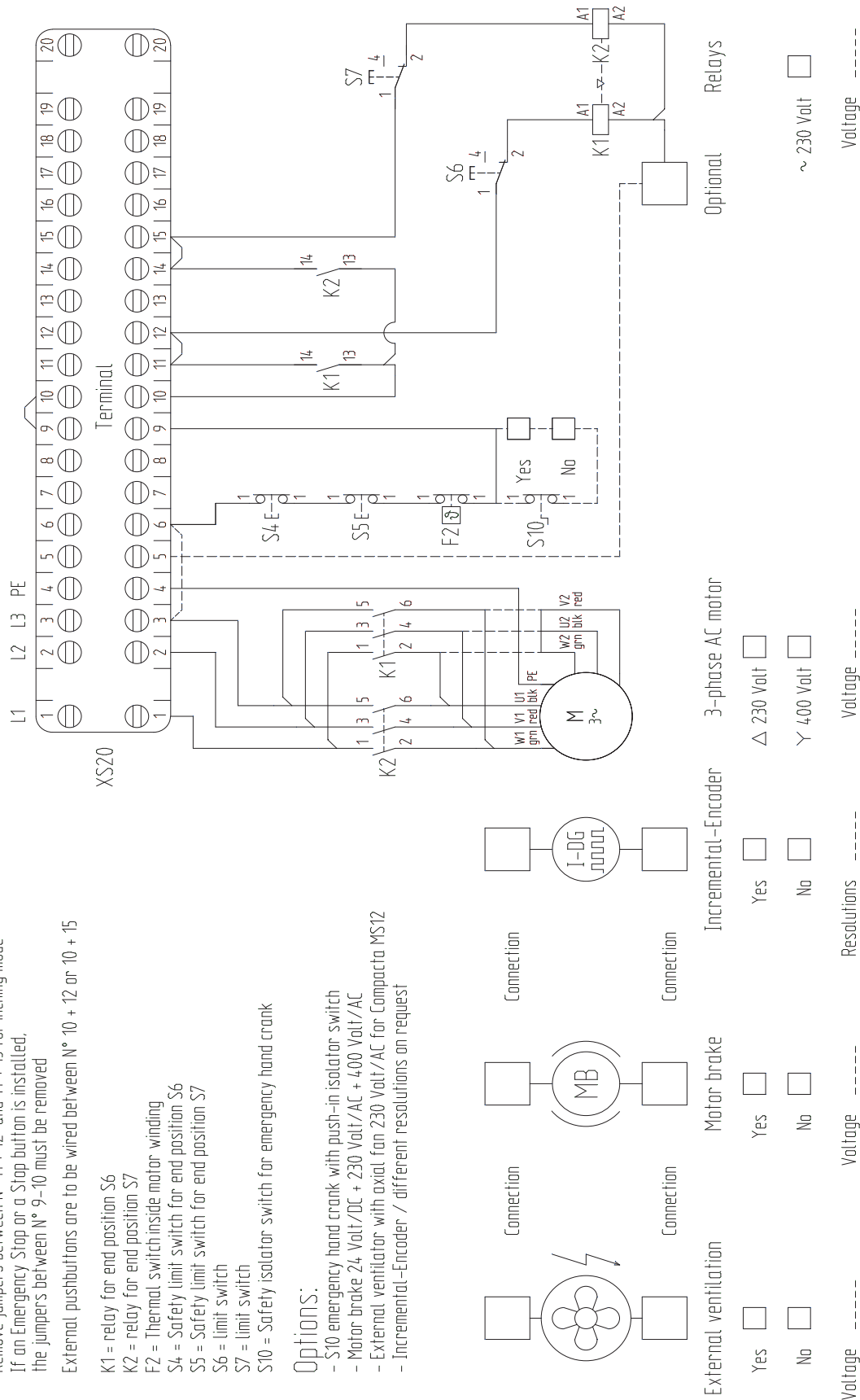
Built-in limit switches - version 6



Subject to technical changes

Slip-on geared motor COMPACTA

Built-in limit switches - version 1 Connection plan with internal wiring



Attention !

The relays are mechanical interlocked
 The control unit as standard is locked
 Remove jumpers between N° 11 + 12 and 14 + 15 for inching mode
 If an Emergency Stop or a Stop button is installed, the jumpers between N° 9-10 must be removed
 External pushbuttons are to be wired between N° 10 + 12 or 10 + 15

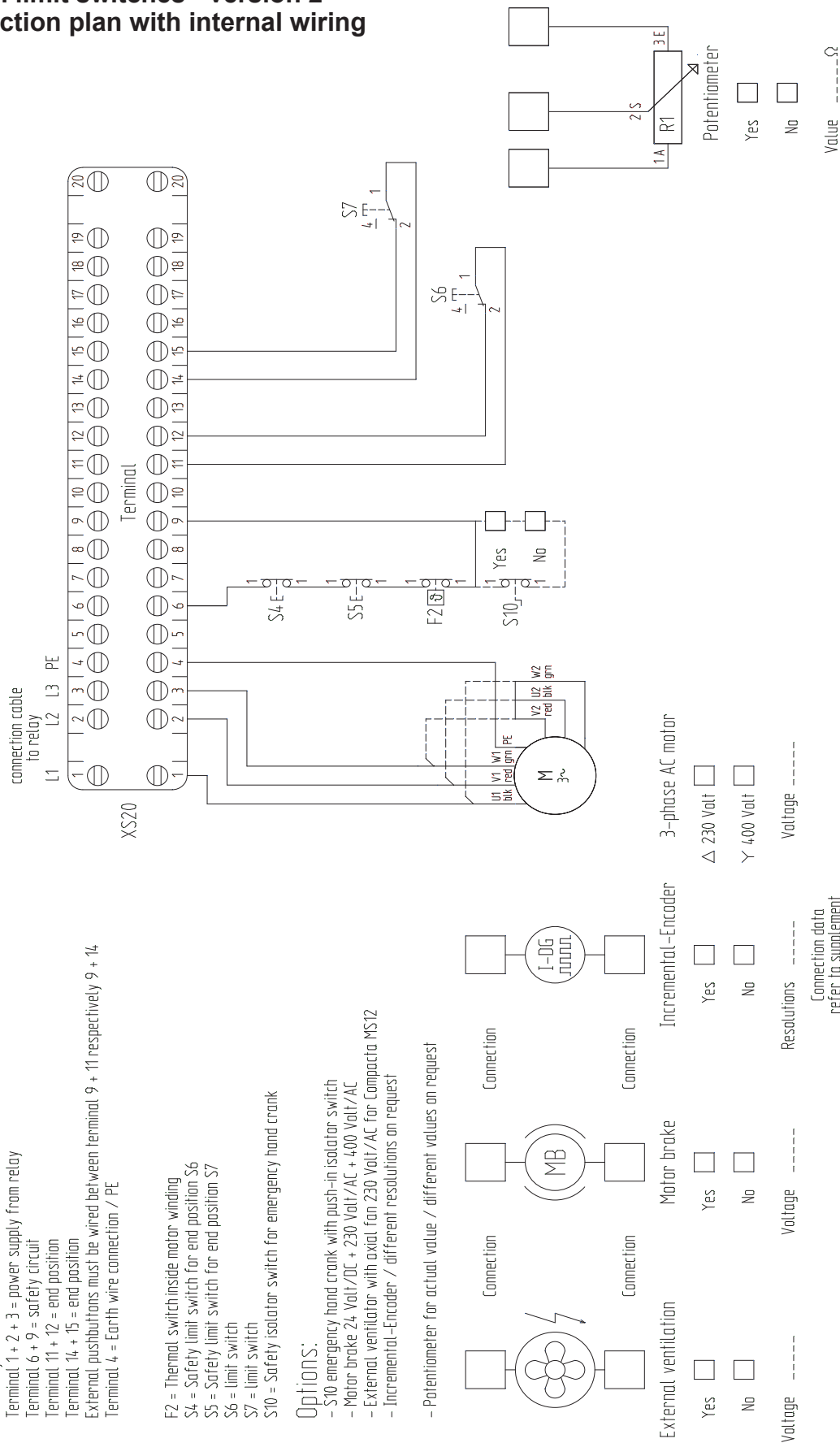
K1 = relay for end position S6
 K2 = relay for end position S7
 F2 = Thermal switch inside motor winding
 S4 = Safety limit switch for end position S6
 S5 = Safety limit switch for end position S7
 S6 = limit switch
 S7 = limit switch
 S10 = Safety isolator switch for emergency hand crank

Options:

- S10 emergency hand crank with push-in isolator switch
- Motor brake 24 Volt / DC + 230 Volt / AC + 400 Volt / AC
- External ventilator with axial fan 230 Volt / AC for Compacta MS12
- Incremental-Encoder / different resolutions on request

Slip-on geared motor COMPACTA

Built-in limit switches - version 2 Connection plan with internal wiring



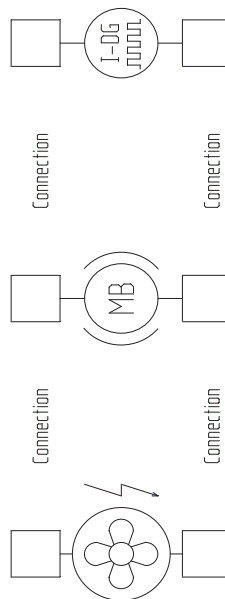
Attention !

- The relays used must be interlocked
- Terminal 1 + 2 + 3 = power supply from relay
- Terminal 6 + 9 = safety circuit
- Terminal 11 + 12 = end position
- Terminal 14 + 15 = end position
- External pushbuttons must be wired between terminal 9 + 11 respectively 9 + 14
- Terminal 4 = Earth wire connection / PE

- F2 = Thermal switch inside motor winding
- S4 = Safety limit switch for end position S6
- S5 = Safety limit switch for end position S7
- S6 = limit switch
- S7 = limit switch
- S10 = Safety isolator switch for emergency hand crank

Options:

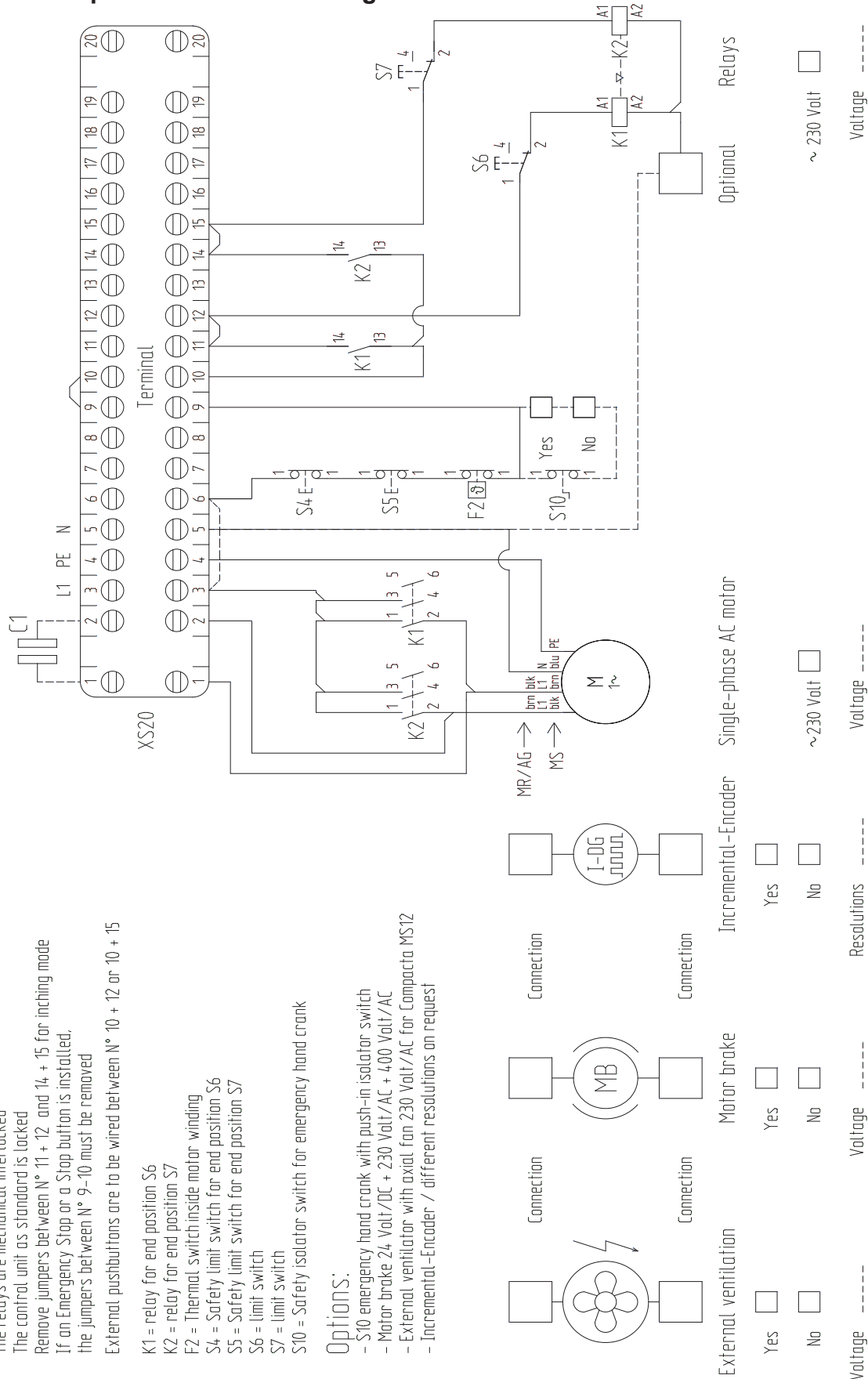
- S10 emergency hand crank with push-in isolator switch
- Motor brake 24 Volt / DC + 230 Volt / AC + 400 Volt / AC
- External ventilator with axial fan 230 Volt / AC for Compacta MS12
- Incremental-Encoder / different resolutions on request
- Potentiometer for actual value / different values on request



Subject to technical changes

Slip-on geared motor COMPACTA

Built-in limit switches - version 11 Connection plan with internal wiring



Attention !

The relays are mechanical interlocked
The control unit as standard is locked
Remove jumpers between N° 11 + 12 and 14 + 15 for inching mode
If an Emergency Stop or a Stop button is installed, the jumpers between N° 9-10 must be removed
External pushbuttons are to be wired between N° 10 + 12 or 10 + 15

K1 = relay for end position S6
K2 = relay for end position S7
F2 = Thermal switch inside motor winding
S4 = Safety limit switch for end position S6
S5 = Safety limit switch for end position S7
S6 = limit switch
S7 = limit switch
S10 = Safety isolator switch for emergency hand crank

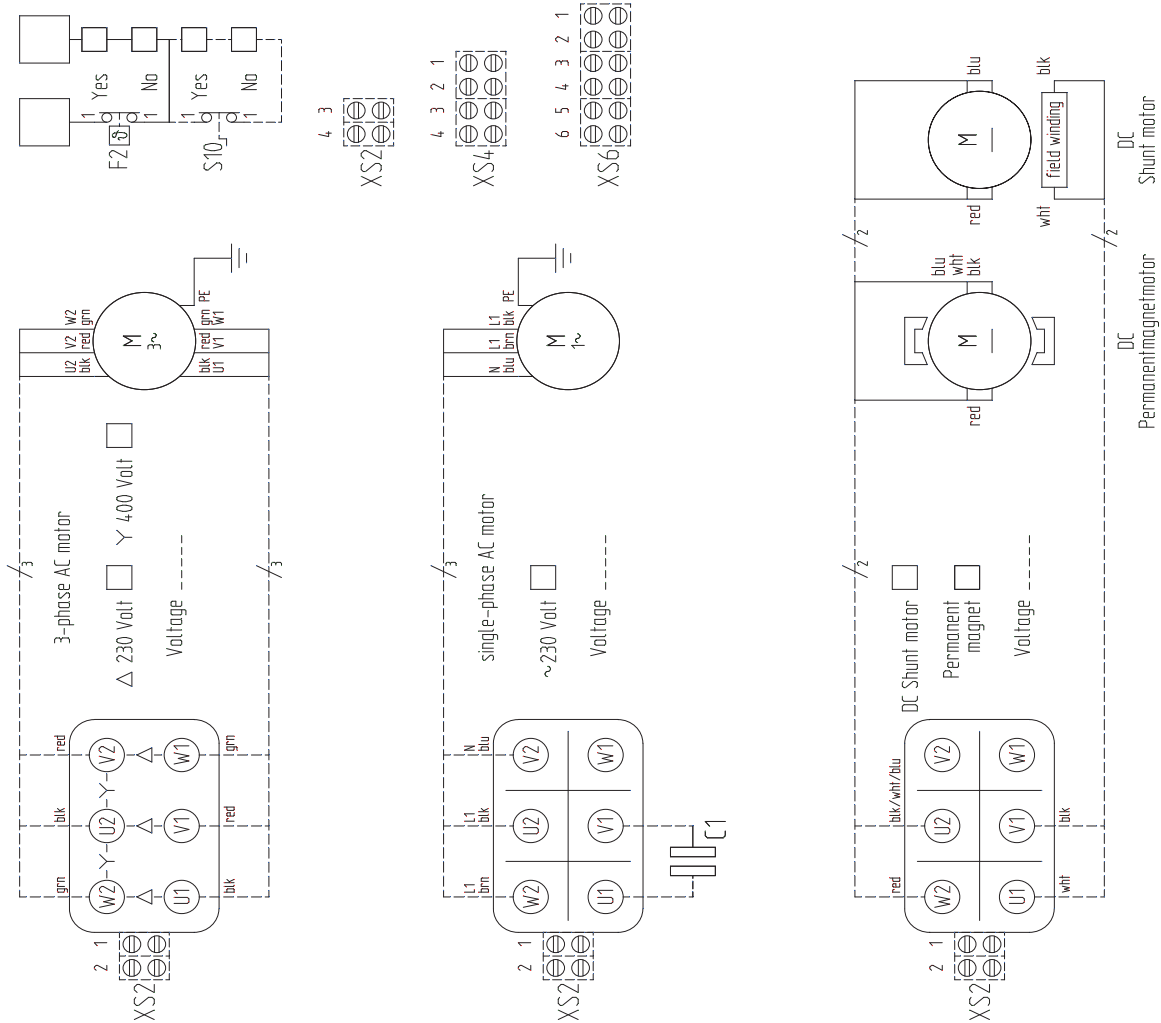
Options:

- S10 emergency hand crank with push-in isolator switch
- Motor brake 24 Volt/DC + 230 Volt/AC + 400 Volt/AC
- External ventilator with axial fan 230 Volt/AC for Compacta MS12
- Incremental-Encoder / different resolutions on request

Subject to technical changes

Slip-on geared motor COMPACTA

Connection diagram with terminal box



Attention !

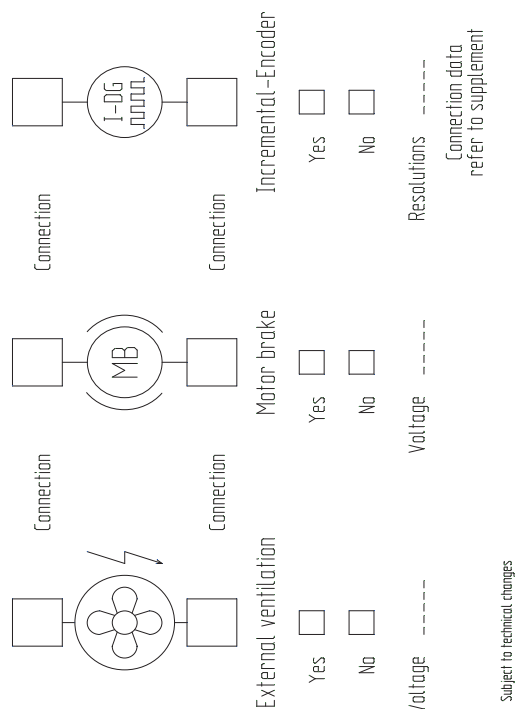
The relays used must be interlocked

F2 = Thermal switch
 XS2 = terminal strip 2 pole
 XS4 = terminal strip 4 pole
 XS6 = terminal strip 6 pole

S10 = Safety isolator switch for emergency hand crank

Options:

- S10 emergency hand crank with push-in isolator switch
- Motor brake 24 Volt/DC + 230 Volt/AC + 400 Volt/AC
- External ventilator with axial fan 230 Volt/AC for Compacta MS12
- Incremental-Encoder / different resolutions on request



Subject to technical changes

Slip-on geared motor COMPACTA

Technical questionnaire

Company _____

Date _____

Processed by _____

Tel.-No. _____

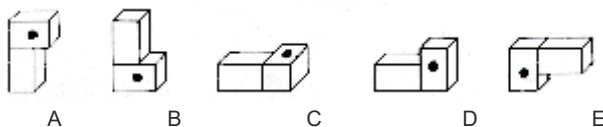
Quantity required _____

Dear customer,

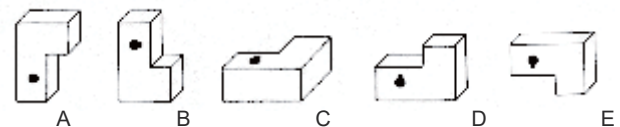
In your own interest, you should answer the questions below as precisely as possible in order to submit a detailed quotation.

1. Application? _____
2. What output speed / torque is required ? _____ rpm / _____ Nm
3. Operating voltage (Y or Δ to be stated for three phase A.C. voltage) _____ Volt
4. Mains voltage ☐ Terminal box ☐ Integrated limit switches
5. Switch control version No. _____, number of rev. at output shaft _____
6. Start-up conditions ☐ Easy ☐ Moderately difficult ☐ Difficult
7. Operating mode ☐ Continuous duty (only with motor cooling)
☐ Short operating time
☐ Intermittent service % relative duty _____
 Operating time _____ min.
 Standstill _____ min.
 Number of switching cycles per hour _____
8. Will the drive be subjected to normal ambient temperature? Temperature _____ °C
9. What enclosure is the drive to have? (Enclos. IP 54 is standard) IP _____
10. Automatic interlock (not a safety issue) ☐ necessary ☐ permissible ☐ not perm.
11. Is the motor to be equipped with a brake?
 (This is necessary if the transmission is not to have an automatic interlock or if precise positioning is required) ☐ Yes ☐ No
12. Is the motor to be equipped with a slipping clutch? (only with type MS 12) ☐ Yes ☐ No
13. Transmission fixing (only important for type AG) ☐ Cover (recomm. for type AG) ☐ Casing
14. Additional equipment _____
15. Are persons in danger in case of failure of drive? ☐ Yes ☐ No
16. In what position is the drive to be mounted?
 Caution! Please specify the installation position drawn or special positions. _____

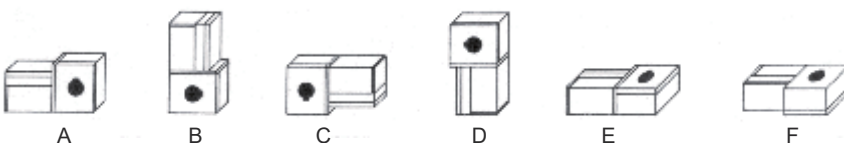
Type MS



Type MR



Type AG



Slip-on geared motor COMPACTA

