

防止触及限定保护的带电部分

保护等级 IP 00 按 IEC 60529

⚠ 触指安全性符合 DIN VDE 0106 第100部分。调整、维修应由专业人员才能担任，并严格按照使用说明书。

安装

外形尺寸见图 I (单位: mm):

-图 I a 交流操作

-图 I b 直流操作

注: * 对接地部件的最小距离。

接触器可借助接触器底上滑鞍扣装在35mm宽的标准安装导轨 (DIN EN 50 022) 上。或用2只M4螺钉安装, 用螺钉安装时, 一定要装平垫圈和弹簧垫圈。在安装时要防止外来颗粒, 例如防止细铁屑进入里面。如果接触器暴露于灰砂、粉尘及腐蚀性环境中, 应加装防护罩。

允许的安装位置见图 II:

-图 II a 交流操作

-图 II b 直流操作

接线

紧固螺钉可用电动螺丝刀旋紧, 螺丝刀刀口宽度: 5~6mm

即使不用的接线螺钉亦必须拧紧。

允许的主电路导线截面积

	单线连接		双线连接	
实心导线 mm ²	1~16	1~16	最大16	最大16
无套筒端的多股导线 mm ²	2.5~16	1.5~16	最大10	最大16
有套筒端的多股导线 mm ²	1~16	1~16	最大10	最大16
导线 mm ²	2.5~25	1.5~25	最大10	最大25
AWG制导线	14~3	16~3	最大6	最大3
按DIN46231 接线端子mm ²	1~6	1~6	最大6	最大6
剥线长度	10mm			
紧固力矩	2.5~3.0Nm / 22~26.5 lb.in			

允许的辅助电路导线截面积

实心导线	2×0.5~1 mm ²
	2×1~2.5 mm ²
具有套筒端的多股导线	2×0.5~1 mm ²
	2×0.75~2.5 mm ²
AWG制导线	2×AWG18~12
紧固力矩	0.8~1.4Nm / 7~12lb.in

仅采用75℃铜线

接线端子的电路图及位置见图III。

操作

遵守控制电压 (见线圈标牌)

接触器通断状态由接触器支架显示: 见图IV。

⚠ 当系统电压施加且负载连接时, 不要靠压下接触器支架来操作接触器。

当发生短路之后, 必须检查主触头及灭弧室。

维修保养

下列零部件可以更换: 主触头、灭弧室、线圈、辅助触头组。

订货号见产品样本。

只有用本来的备用件才能保证接触器的安全可靠。

清洁

用吸尘器除尘。

辅助触头组

更换情况见图V。

灭弧室和主触头

取下灭弧室 (图VI1, 2), 检查主触头 (图VI3), 如有必要可用螺丝刀轻微分开烧焊触头, 氧化的或粗糙的触头可继续使用, 不要修光或擦拭它们。如果触头被电蚀到露出基体材料, 则必须更换触头。

触头更换情况见图VI4, 5, 6。

没有必要断开主接触器的连线。检查灭弧室, 如有必要则更换它。只有装好灭弧室才能投入运行 (图VI7, 8)。

线圈

线圈的更换见图VII:

-图VII a 交流操作

-图VII b 直流操作

确保线圈电极表面清洁, 不要用润滑油或尖物清洁线圈。

技术数据

重量: -交流操作 约 760 g
-直流操作 约 1430 g

允许的环境温度

工作时 -25℃ ~ +55℃

贮存时 -50℃ ~ +80℃

主回路

额定绝缘电压U_i AC 690V

额定工作电流I_e/AC-1 (55℃) A 55

电动机额定功率P_N/AC-3

额定工作电压

		3TF44	3TF45
- 230V	kW	8.5	11
- 240V	kW	9	12
- 400V	kW	15	18.5
- 415V	kW	17	20
- 500V	kW	21	25
- 690V	kW	23	23

短路保护:

保护等级按DIN VDE

0660/IEC 60947-4-1 **

熔断器 gL(gG)

	A	80
-配合类型1	A	80
-配合类型2	A	63
-不熔焊I _k <100×I _e	A	25
-不熔焊I _k ≥100×I _e	A	25

辅助回路

额定绝缘电压U_i AC 690V

额定工作电流I_e/AC-15/AC-11 A 5.6 (在电压230V时)

短路保护:

-熔断器

NEOZED 和DIAZED, gL(gG) A 16

-小型断路器 (C特性) A 10

其他数据和附件见产品样本

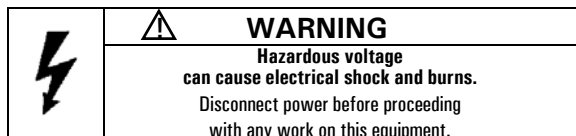
** 备注: 按照IEC 60947/ VDE 0660, 配合类型表示:

“配合类型1”: 短路电流可引起接触器损坏, 如有必要接触器必须更换。 “配合类型2”: 允许触头有可以容易地分开的熔焊。

Instructions

Order No.: 4NEB 522 4571-10 e5

English



WARNING
Hazardous voltage
 can cause electrical shock and burns.
 Disconnect power before proceeding
 with any work on this equipment.

Limited protection against contact with live parts

Degree of protection IP 00 to IEC 60529.

Safe from finger touch to DIN VDE 0106, Part 100.

Commissioning and maintenance by qualified personnel only.

Follow the operating instructions.

Installation

For dimension drawings see Fig. I (dimensions in mm).

- Fig. I a a.c. operated
- Fig. I b d.c. operated

* Minimum clearances from earthed parts.

Snap onto 35 mm standard mounting rail to DIN EN 50 022 or fix on a plain surface with two M4 screws. With screw mounting, always use plain washers and spring washers.

Cover the contactors during installation if foreign particles, such as swarf, can fall onto them. Install contactors in a housing if they are exposed to dirt, dust or aggressive atmospheres.

For permissible mounting positions see

- Fig. II a a.c. operated
- Fig. II b d.c. operated

Connection

The terminal screws can be tightened with a power screwdriver.

Screwdriver blade width: 5 to 6 mm. Tighten all terminal screws even if not used.

Permissible conductor cross-sections for main conductor:

	one terminal connected		both terminals connected	
Solid (mm ²)	1 to 16	1 to 16	max.16	max.16
Finely stranded without end sleeve (mm ²)	2.5 to 16	1.5 to 16	max.10	max.16
Finely stranded with end sleeve (mm ²)	1 to 16	1 to 16	max.10	max.16
Stranded (mm ²)	2.5 to 25	1.5 to 25	max.10	max.25
AWG wires, solid and stranded	14 to 3	16 to 3	max.6	max.3
Terminal pin in accordance with DIN 46231 (mm ²)	1 to 6	1 to 6	max.6	max.6

Stripped length 10mm
 Tightening torque 2.5 to 3.0Nm / 22 to 26.5 lb.in

Permissible conductor cross-sections for auxiliary conductor:

Solid 2×0.5 to 1mm²
 2×1 to 2.5 mm²
 Finely stranded with end sleeve 2×0.5 to 1mm²
 2×0.75 to 2.5 mm²
 AWG wires 2×AWG 18 to 12
 Stripped length 10mm
 Tightening torque standard type 0.8 to 1.4Nm / 7 to 12 lb.in

Use 75°C copper wire only.

For circuit diagrams and position of connection terminals see Fig. III

Operation

Observe operating voltage (see rating plate of magnet coil).

The operating state of the contactor is shown at the position indicator; see Fig. IV.



When the system voltage is applied and the load is connected, do not operate the contactor by pressing down the contact carrier.

Maintenance

The following components can be replaced: Main contacts, arc chute, magnet coil, auxiliary contact blocks. For Order No. see Catalog.

Only use of original spare parts ensures the operational safety of the contactors.

Cleaning

Remove dust by suction.

Auxiliary contact block

For replacement see Fig. VI.

Arc chute and main contacts

Remove arc chute (Fig. VI/1,2). Check main contacts (Fig. VI/3) .If necessary separate slightly welded contacts with a screwdriver.

Dark or tough contacts can still function. Do not refinish or grease them. If the contact facings are eroded so that the carrier material becomes visible the contacts must be replaced.

For replacement of contacts see Fig. VI/4,5,6. It is not necessary to disconnect the main conductors. Check the arc chute and replace it if necessary. Put into operation only with the arc chute fitted (fig. VI/7,8).

Magnet coil

For coil replacement see Fig. VII: - Fig. VII a a.c. coil
 - Fig. VII b d.c. coil

Ensure that the pole faces of the magnet coil are clean. Do not use grease solvents or sharp objects for cleaning.

Technical Data

Weight: a.c. operated approx. 760g
 d.c. operated approx. 1430g

Permissible ambient temperature

- Operation -25 °C to +55 °C
 - Storage -50 °C to +80 °C

Main circuit

Rated insulation voltage U_i AC 690V

Rated operating current I_e/AC-1(55 °C) A 55

Rated operational voltage		Motor rating P _N /AC-3	
		3TF44	3TF45
-230V	kW	8.5	11
-240V	kW	9	12
-400V	kW	15	18.5
-415V	kW	17	20
-500V	kW	21	25
-690V	kW	23	23

Short-circuit protection:

Degree of protection to DIN VDE 0660 part 102A/IEC 60947-4-1 ** Fuse-links Duty class gL(gG)

-assignment type 1	A	80
-assignment type 2	A	63
-non-welding I _k < 100×I _e	A	25
-non-welding I _k ≥ 100×I _e	A	25

Auxiliary circuit

Rated insulation voltage U_i AC 690V

Rated operating current I_e/AC-15/AC-11 5.6A at AC 230V

Short-circuit protection:

- Fuse-links		
NEOZED and DIAZED, gL (gG)	A	16
- Circuit-breaker, C-char	A	10

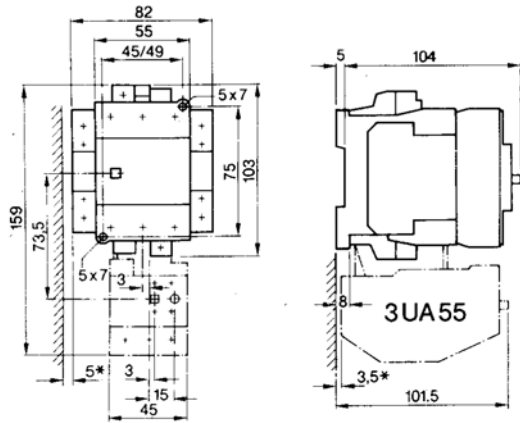
For further data and accessories see Catalog.

**Footnote: According to IEC 60947 / VDE 0660, the types of protection mean:

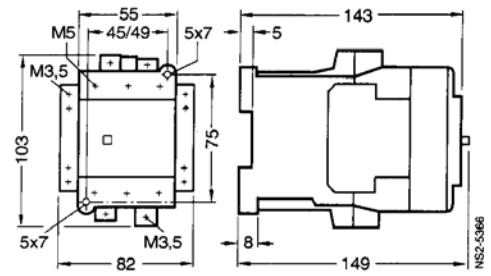
"Assignment type 1": Short circuits can cause damage to the contactors making replacement of the equipment necessary.

"Assignment type 2": Easily separable contact welding but no other damage.

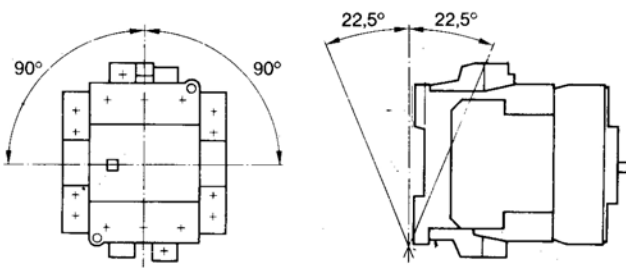
I a



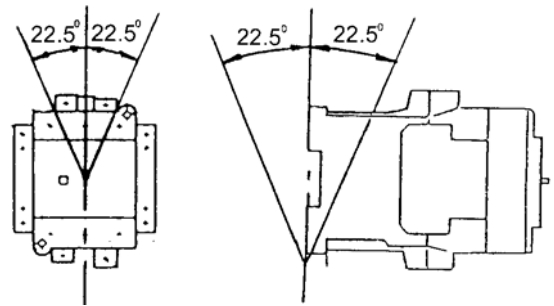
b



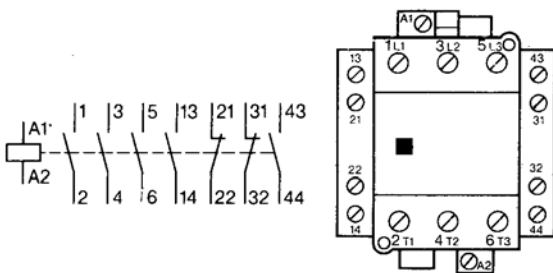
II a



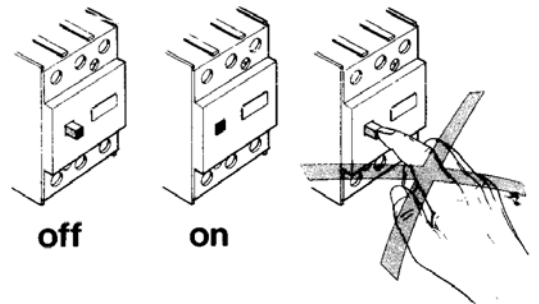
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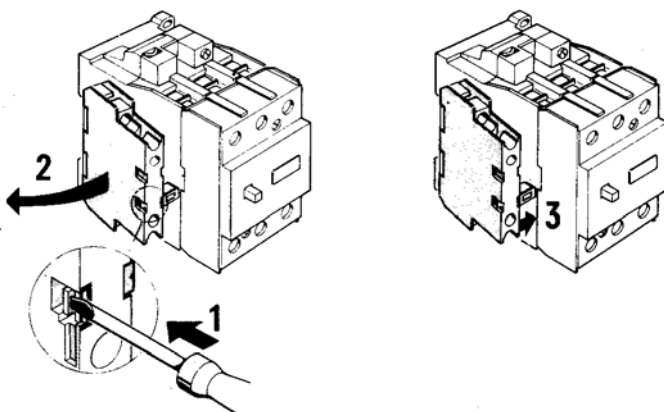
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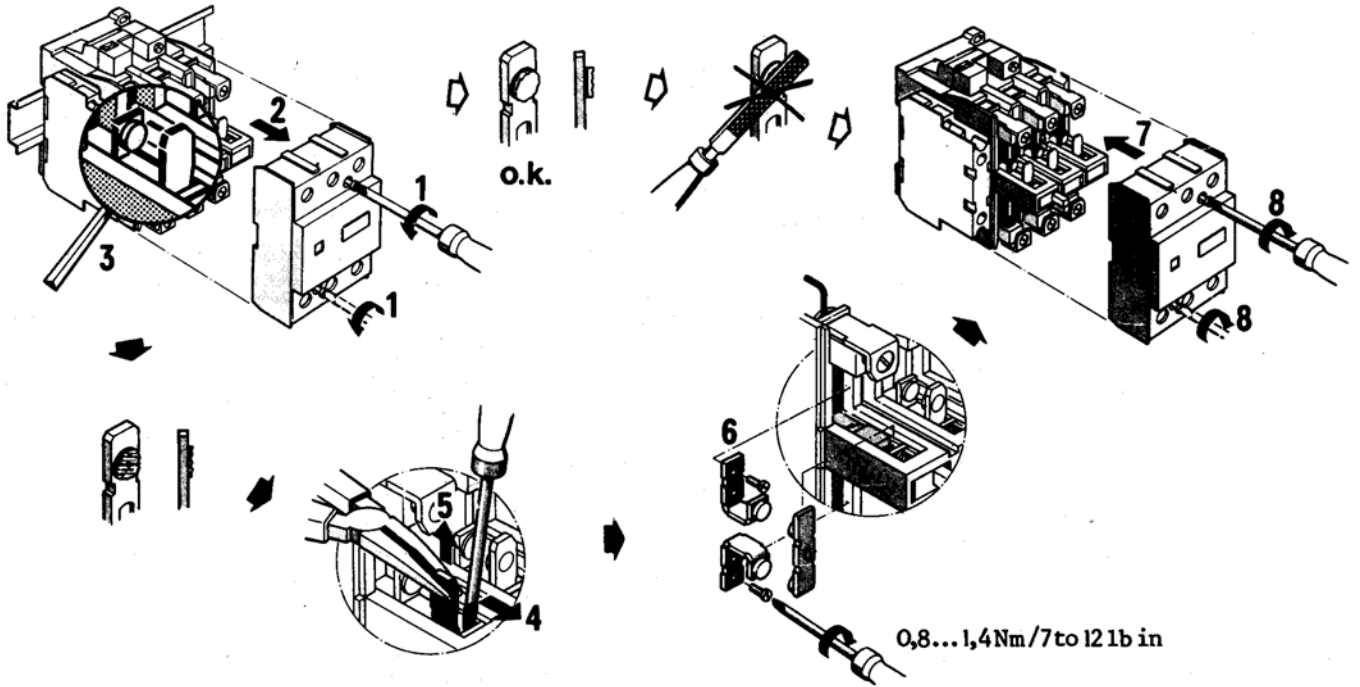
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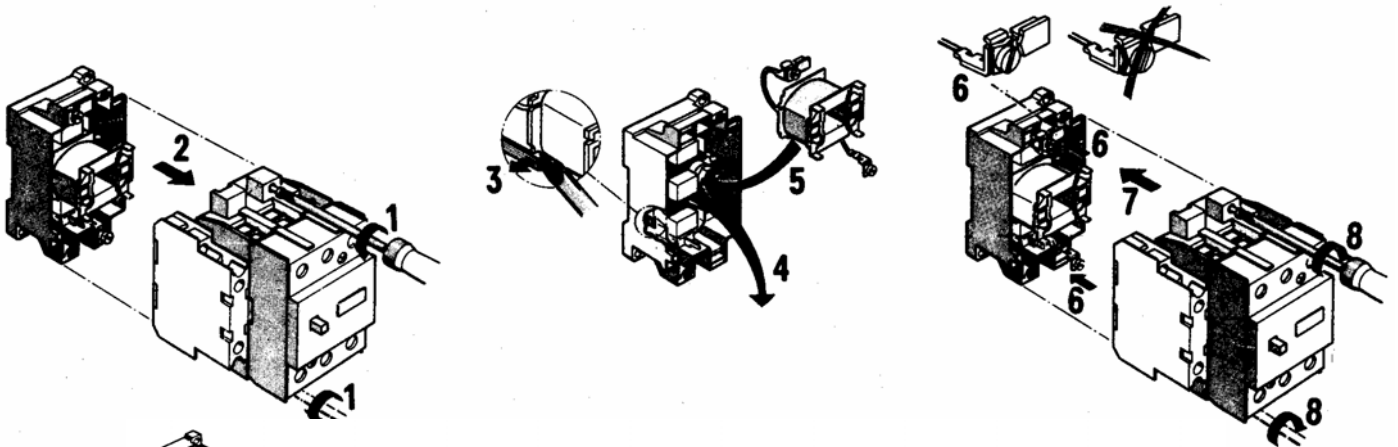
V



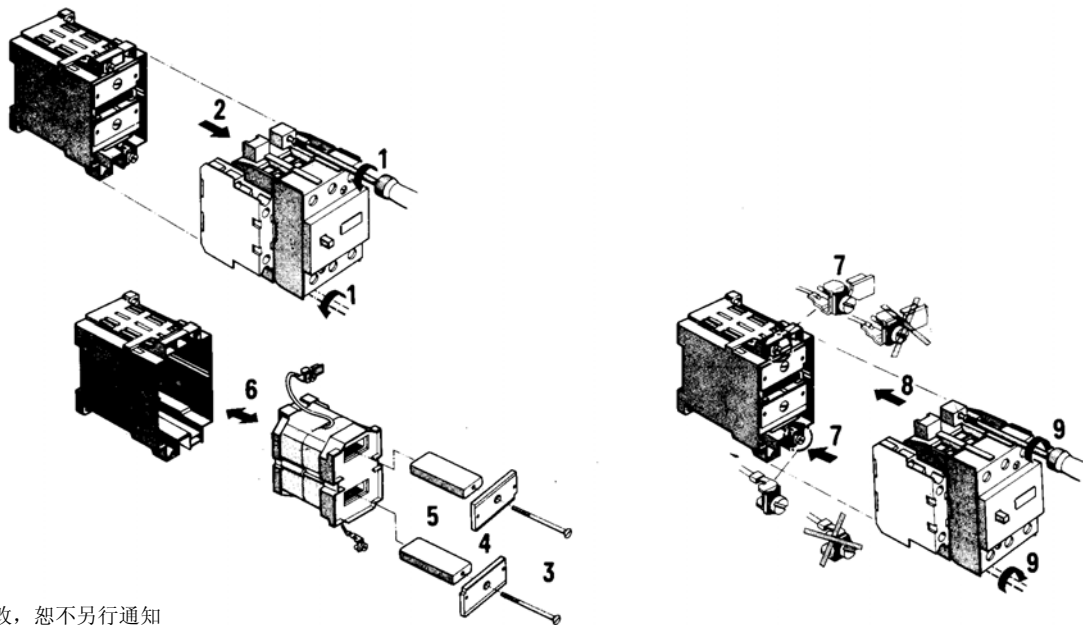
VI



VII a



VII D



资料如有更改，恕不另行通知

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http://www.ad.siemens.com.cn/about_us/jv/seal.asp