



Sample image

## Datasheet

**Article number:** 70011304

**Designation:** KG80.T103/D-A061.KL71V

**Description:** Switch

|                                                                                                                                                                                                                                        |                          |                          |                                                                  |                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|------------------------------------------------------------------|-----------------|
| IEC 60947-3 EN 60947-3, VDE 0660 Teil 107                                                                                                                                                                                              |                          |                          |                                                                  |                 |
| Rated insulation voltage Ui                                                                                                                                                                                                            |                          |                          |                                                                  |                 |
| Voltage (V) AC / DC                                                                                                                                                                                                                    |                          |                          |                                                                  |                 |
| 690 AC                                                                                                                                                                                                                                 |                          |                          |                                                                  |                 |
| Rated uninterrupted current Iu/Ith                                                                                                                                                                                                     |                          |                          |                                                                  |                 |
| Current (A)                                                                                                                                                                                                                            | Ambient temperature (°C) | Peak temperature (°C)    | additional requirements                                          |                 |
| 80                                                                                                                                                                                                                                     | 50                       | 55                       | Ambient temperature +50°C during 24 hours with peaks up to +55°C |                 |
| Rated operational current Ie                                                                                                                                                                                                           |                          |                          |                                                                  |                 |
| Utilization category                                                                                                                                                                                                                   |                          | Voltage (V)              |                                                                  | Current (A)     |
| AC-32A                                                                                                                                                                                                                                 |                          | 20 - 400                 |                                                                  | 80              |
| Rated operational power                                                                                                                                                                                                                |                          |                          |                                                                  |                 |
| Utilization category                                                                                                                                                                                                                   | Voltage (V)              | No. of phases            | No. of poles                                                     | Power (kW)      |
| AC-3                                                                                                                                                                                                                                   | 220 - 240                | 3                        | 3                                                                | 15              |
| AC-3                                                                                                                                                                                                                                   | 380 - 440                | 3                        | 3                                                                | 22              |
| AC-3                                                                                                                                                                                                                                   | 660 - 690                | 3                        | 3                                                                | 18,50           |
| AC-23A                                                                                                                                                                                                                                 | 220 - 240                | 3                        | 3                                                                | 18,50           |
| AC-23A                                                                                                                                                                                                                                 | 380 - 440                | 3                        | 3                                                                | 30              |
| AC-23A                                                                                                                                                                                                                                 | 660 - 690                | 3                        | 3                                                                | 22              |
| Max Fuse Rating IEC                                                                                                                                                                                                                    |                          |                          |                                                                  |                 |
| Fuse characteristic                                                                                                                                                                                                                    |                          | No. of Fuses             |                                                                  | Current (A)     |
| gG                                                                                                                                                                                                                                     |                          | 1                        |                                                                  | 80              |
| UL60947-4-1 , UL508                                                                                                                                                                                                                    |                          |                          |                                                                  |                 |
| Nominal Voltage                                                                                                                                                                                                                        |                          |                          |                                                                  |                 |
| Voltage (V) AC / DC                                                                                                                                                                                                                    |                          |                          |                                                                  |                 |
| 600 AC                                                                                                                                                                                                                                 |                          |                          |                                                                  |                 |
| Rated insulation voltage Ui                                                                                                                                                                                                            |                          |                          |                                                                  |                 |
| Voltage (V) AC / DC                                                                                                                                                                                                                    |                          |                          |                                                                  |                 |
| 600 AC                                                                                                                                                                                                                                 |                          |                          |                                                                  |                 |
| Rated thermal current                                                                                                                                                                                                                  |                          |                          |                                                                  |                 |
| Current (A)                                                                                                                                                                                                                            |                          | Ambient temperature (°C) |                                                                  | Additional Text |
| 80                                                                                                                                                                                                                                     |                          | 0 - 40                   |                                                                  | --              |
| Horsepower rating                                                                                                                                                                                                                      |                          |                          |                                                                  |                 |
| Across-the-Line Motor Starting                                                                                                                                                                                                         | Voltage (V)              | No. of phases            | No. of poles                                                     | Power (HP)      |
| DOL                                                                                                                                                                                                                                    | 110 - 120                | 1                        | 2                                                                | 5               |
| DOL                                                                                                                                                                                                                                    | 220 - 240                | 1                        | 2                                                                | 10              |
| DOL                                                                                                                                                                                                                                    | 277 - 277                | 1                        | 2                                                                | 15              |
| DOL                                                                                                                                                                                                                                    | 415 - 415                | 1                        | 2                                                                | 20              |
| DOL                                                                                                                                                                                                                                    | 440 - 480                | 1                        | 2                                                                | 20              |
| DOL                                                                                                                                                                                                                                    | 550 - 600                | 1                        | 2                                                                | 30              |
| DOL                                                                                                                                                                                                                                    | 110 - 120                | 3                        | 3                                                                | 10              |
| DOL                                                                                                                                                                                                                                    | 220 - 240                | 3                        | 3                                                                | 25              |
| DOL                                                                                                                                                                                                                                    | 415 - 415                | 3                        | 3                                                                | 30              |
| DOL                                                                                                                                                                                                                                    | 440 - 480                | 3                        | 3                                                                | 50              |
| DOL                                                                                                                                                                                                                                    | 550 - 600                | 3                        | 3                                                                | 50              |
| SCCR / Max. fuse rating                                                                                                                                                                                                                |                          |                          |                                                                  |                 |
| Conditions of acceptability                                                                                                                                                                                                            |                          |                          |                                                                  |                 |
| These devices are suitable for use on circuits capable of delivering not more than 10kA rms symmetrical amperes, 600V ac max. when protected by Type RK1 fuses or Circuit Breaker Type SFHA36AT0250, manufactured by General Electric. |                          |                          |                                                                  |                 |
| Suitable for use on a circuit capable of delivering not more than 65000 rms symmetrical amperes 600V max., when protected by Class J fuses, 100A max.                                                                                  |                          |                          |                                                                  |                 |
| Temp. rating of wire                                                                                                                                                                                                                   |                          |                          |                                                                  |                 |
| Temperature rating (°C)                                                                                                                                                                                                                |                          | Current (A) Text         |                                                                  |                 |
| 75                                                                                                                                                                                                                                     |                          | -- --                    |                                                                  |                 |
| Connecting instructions                                                                                                                                                                                                                |                          |                          |                                                                  |                 |
| Markings                                                                                                                                                                                                                               |                          |                          |                                                                  |                 |
| Break all lines.                                                                                                                                                                                                                       |                          |                          |                                                                  |                 |
| General Use                                                                                                                                                                                                                            |                          |                          |                                                                  |                 |
| AC / DC                                                                                                                                                                                                                                | Voltage (V)              | Current (A)              | No. of phases                                                    | No. of poles    |
| AC                                                                                                                                                                                                                                     | 277                      | 80                       | 1                                                                | 1               |
| AC                                                                                                                                                                                                                                     | 600                      | 80                       | 1                                                                | 2               |
| AC                                                                                                                                                                                                                                     | 600                      | 80                       | 3                                                                | 3               |
| No. of contacts in series                                                                                                                                                                                                              |                          |                          |                                                                  |                 |
| 1                                                                                                                                                                                                                                      |                          |                          |                                                                  |                 |
| 1                                                                                                                                                                                                                                      |                          |                          |                                                                  |                 |

**General Information**
**Text**

- The operating handle and position indicating means to be used with these manual motor controllers should be provided from the manufacturer, or the operating handle and position indicating means to be used should have been previously evaluated in combination with the manual motor controllers.

- When intended for use as a motor disconnecter the device shall be provided with a method of being locked in the OFF-position.

**CSA**
**Nominal Voltage**

Voltage (V) AC / DC  
600 AC

**Rated insulation voltage Ui**

Voltage (V) AC / DC  
600 AC

**Rated thermal current**

Current (A) Ambient temperature (°C) Additional Text  
80 0 - 40 -

**Horsepower rating**

| Across-the-Line Motor Starting | Voltage (V) | No. of phases | No. of poles | Power (HP) | Ambient temperature [°C] |
|--------------------------------|-------------|---------------|--------------|------------|--------------------------|
| DOL                            | 110 - 120   | 1             | 2            | 5          | 40                       |
| DOL                            | 220 - 240   | 1             | 2            | 10         | 40                       |
| DOL                            | 277 - 277   | 1             | 2            | 15         | 40                       |
| DOL                            | 415 - 415   | 1             | 2            | 20         | 40                       |
| DOL                            | 440 - 480   | 1             | 2            | 20         | 40                       |
| DOL                            | 550 - 600   | 1             | 2            | 30         | 40                       |
| DOL                            | 110 - 120   | 3             | 3            | 10         | 40                       |
| DOL                            | 220 - 240   | 3             | 3            | 25         | 40                       |
| DOL                            | 415 - 415   | 3             | 3            | 30         | 40                       |
| DOL                            | 440 - 480   | 3             | 3            | 50         | 40                       |
| DOL                            | 550 - 600   | 3             | 3            | 50         | 40                       |

**Temp. rating of wire**

Temperature rating (°C) Current (A) Text  
75 -- --

**General Use**

| AC / DC | Voltage (V) | Current (A) | No. of phases | No. of poles | No. of contacts in series |
|---------|-------------|-------------|---------------|--------------|---------------------------|
| AC      | 277         | 80          | 1             | 1            | 1                         |
| AC      | 600         | 80          | 1             | 2            | 1                         |
| AC      | 600         | 80          | 3             | 3            | 1                         |

**GENERAL TECHNICAL INFORMATION**
**Size of conductor**

| composition of conductor                          | Min. / Max. value | No. of conductor per terminal | Cross section (mm²) or (AWG/kcmil) | Material of the wire |
|---------------------------------------------------|-------------------|-------------------------------|------------------------------------|----------------------|
| solid wire                                        | Min.              | 1                             | 2.5mm²                             | Copper               |
| flexible wire                                     | Min.              | 1                             | 4mm²                               | Copper               |
| flexible wire                                     | Max.              | 1                             | 35mm²                              | Copper               |
| flexible wire                                     | Max.              | 1                             | AWG 2                              | Copper               |
| Single-core or stranded wire                      | Max.              | 1                             | AWG 1/0                            | Copper               |
| Single-core or stranded wire                      | Max.              | 1                             | 50mm²                              | Copper               |
| flexible wire with sleeve                         | Max.              | 1                             | 35mm²                              | Copper               |
| flexible wire with ferrule according to DIN 46228 | Min.              | 1                             | 2.5mm²                             | Copper               |

**Stripping length**

Length (mm) --

14

**Recommended screw driver**

| Type of screw driver                   | Value   |
|----------------------------------------|---------|
| Cross Screwdriver                      | PH2     |
| Slot screwdriver according to DIN 5264 | 1,2x6,5 |

**Tightening torque of screws**

tightening torque (Nm) tightening torque (lb-in)  
3 27

**Approbations**
**Specification**

EAC

CE marking

UK Directives

CSA C.22.2 No.14

GB/T14048.3

**General Information**
**Text**

- EMC Note: This device is suitable for use in environment A and B.

**Marking**


## General Information

### Text

- Do not lubricate or treat contacts.
- Switches may only be mounted, connected and set into operation by qualified persons according to the accepted rules of technology.
- Use copper wire only. Do not coat the wire end with tin.
- Terminals with factory fitted jumper links are tightened during production. Take care during installation to ensure factory fitted links are not lost by undoing both sides of linked terminals. After wiring, all terminal screws must be tightened to recommended torque specifications.

### Waste Electrical & Electronic Equipment (WEEE)

| Picture name                                                                     | Description                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Do not throw in the trash as care must be taken to ensure environmentally sound disposal and recycling. Please either use an environmentally friendly waste disposal company; return to the supplier for disposal; or return direct to the manufacturer, Kraus & Naimer. You can find local Kraus & Naimer offices at <a href="http://www.krausnaimer.com">www.krausnaimer.com</a> |

### Proposition 65

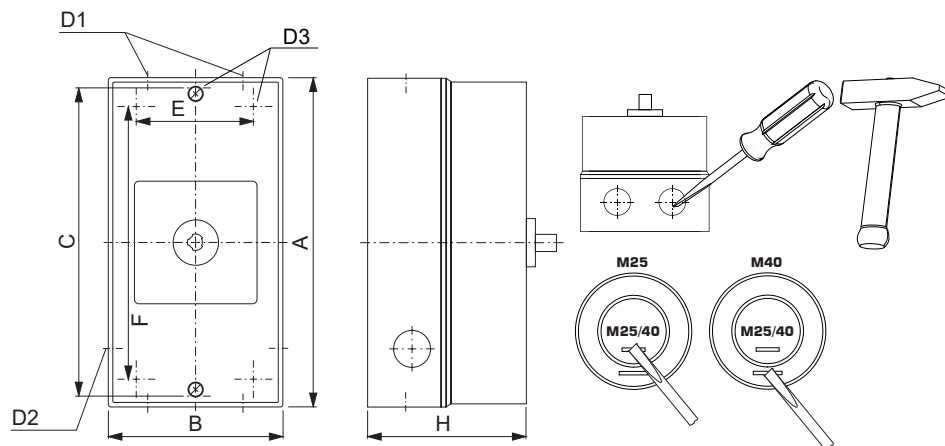
| Picture name                                                                     | Description                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | WARNING: This product can expose you to chemicals including nickel and lead, which is known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> . |

Classification Contact: Rigid contact bridge

Classification Contact Mat: Silver

Classification Terminal: Screw terminal

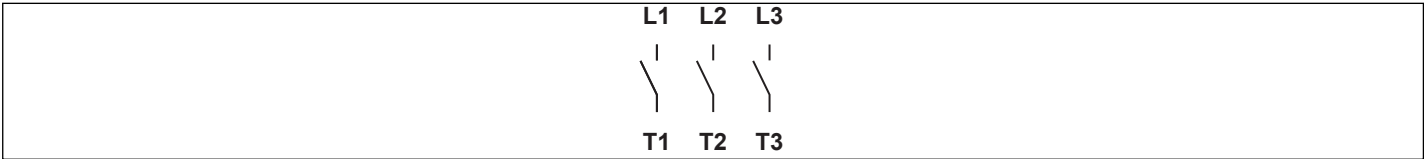
## Mounting-KL71V



|                      |                   |
|----------------------|-------------------|
| IP - Code front side | IP66, IP67, IP69k |
| Stages               | 2,00 - 5,00       |
| A                    | H 250,00 mm       |
| B                    | H 145,00 mm       |
| D1                   | Ø 4,00 x M40/M25  |
| D2                   | Ø 2,00 x M25      |
| D3                   | Ø 6,50 mm         |
| E                    | H 124,00 mm       |
| F                    | H 229,00 mm       |
| H                    | H 107,00 mm       |

Wiring diagram

KG80.T303.KL71V



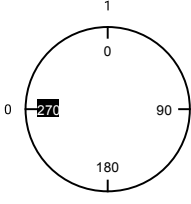
## Switch program

KG80.T303.KL71V



Kraus & Naimer

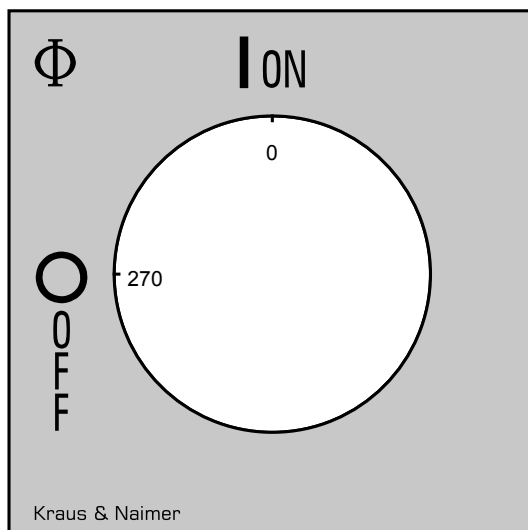
KG80
T303
Page 1 of 1

| Face Plate                                                                                                                                                             |     |    |    |    |   |    |    |    |    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|----|----|---|----|----|----|----|
|                                                                                       |     | L1 | L2 | L3 |   |    |    |    |    |
|                                                                                                                                                                        |     | 1  | 3  | 5  | 7 | 9  | 11 | 13 | 15 |
|                                                                                       |     |    |    |    |   |    |    |    |    |
| Switching Angle <span style="border: 1px solid black; padding: 2px;">90</span><br>Total switching Angle <span style="border: 1px solid black; padding: 2px;">90</span> |     | 2  | 4  | 6  | 8 | 10 | 12 | 14 | 16 |
|                                                                                                                                                                        |     | T1 | T2 | T3 |   |    |    |    |    |
| 0                                                                                                                                                                      | 270 |    |    |    |   |    |    |    |    |
|                                                                                                                                                                        |     |    |    |    |   |    |    |    |    |
|                                                                                                                                                                        |     |    |    |    |   |    |    |    |    |
| 1                                                                                                                                                                      | 0   |    |    |    |   |    |    |    |    |
|                                                                                                                                                                        |     |    |    |    |   |    |    |    |    |
|                                                                                                                                                                        |     |    |    |    |   |    |    |    |    |
|                                                                                                                                                                        | 90  |    |    |    |   |    |    |    |    |
|                                                                                                                                                                        |     |    |    |    |   |    |    |    |    |
|                                                                                                                                                                        |     |    |    |    |   |    |    |    |    |
|                                                                                                                                                                        | 180 |    |    |    |   |    |    |    |    |
|                                                                                                                                                                        |     |    |    |    |   |    |    |    |    |
|                                                                                                                                                                        |     |    |    |    |   |    |    |    |    |
|                                                                                                                                                                        |     |    |    |    |   |    |    |    |    |

Version: 102

## Face plate

S1.F656/C10.V9



## AUXILIARY CONTACTS

(cam operated) for switch type KG20 - KG100C  
and KH(R)16 - KH(R)25B

**Designation:** K2.M510A/2CA-B

**Number of contacts:** "2" 2 auxiliary contacts

**Operation of contacts:** "C" 1 auxiliary contact  
closed in pos. 1 and 1 auxiliary contact closed in  
pos. 0 (NO/NC)

**Type of version:** "A" 1. auxiliary contact module

**Type of mounting:** "-B" for type of mounting VE,  
VE2, silver contacts

### IEC 60947-3 EN 60947-3, VDE 0660 Teil 107

|                                                                 |                          |                       |                                                                  |
|-----------------------------------------------------------------|--------------------------|-----------------------|------------------------------------------------------------------|
| <b>Nominal Voltage</b>                                          |                          |                       |                                                                  |
|                                                                 |                          | Voltage (V) AC / DC   |                                                                  |
|                                                                 |                          | 690 AC                |                                                                  |
| <b>Rated uninterrupted current I<sub>u</sub>/I<sub>th</sub></b> |                          |                       |                                                                  |
| Current (A)                                                     | Ambient temperature (°C) | Peak temperature (°C) | additional requirements                                          |
| 16                                                              | 55                       | 60                    | Ambient temperature +55°C during 24 hours with peaks up to +60°C |
| <b>Rated operational current I<sub>e</sub></b>                  |                          |                       |                                                                  |
| Utilization category                                            | Voltage (V)              |                       | Current (A)                                                      |
| AC-15                                                           | 110 - 240                |                       | 6                                                                |
| AC-15                                                           | 380 - 440                |                       | 3                                                                |
| AC-15                                                           | 500                      |                       | 1,50                                                             |
| AC-21A                                                          | 20 - 690                 |                       | 16                                                               |

### UL60947-4-1, UL508

|                                               |             |                     |                                                      |
|-----------------------------------------------|-------------|---------------------|------------------------------------------------------|
| <b>Nominal Voltage</b>                        |             |                     |                                                      |
|                                               |             | Voltage (V) AC / DC |                                                      |
|                                               |             | 600 AC              |                                                      |
| <b>Rated insulation voltage U<sub>i</sub></b> |             |                     |                                                      |
|                                               |             | Voltage (V) AC / DC |                                                      |
|                                               |             | 600 AC              |                                                      |
| <b>Rated thermal current</b>                  |             |                     |                                                      |
|                                               |             | Current (A)         | Ambient temperature (°C) Additional Text             |
|                                               |             | 10                  | 0 - 40 --                                            |
| <b>Pilot duty rating code</b>                 |             |                     |                                                      |
| Duty Code                                     |             |                     |                                                      |
| A600                                          |             |                     |                                                      |
| <b>General Use</b>                            |             |                     |                                                      |
| AC / DC                                       | Voltage (V) | Current (A)         | No. of phases No. of poles No. of contacts in series |
| AC                                            | 600         | 10                  | 1 1 1                                                |

### GENERAL TECHNICAL INFORMATION

| GENERAL TECHNICAL INFORMATION                                                       |                   |                               |                                                 |                      |
|-------------------------------------------------------------------------------------|-------------------|-------------------------------|-------------------------------------------------|----------------------|
| Size of conductor                                                                   |                   |                               |                                                 |                      |
| composition of conductor                                                            | Min. / Max. value | No. of conductor per terminal | Cross section (mm <sup>2</sup> ) or (AWG/kcmil) | Material of the wire |
| solid wire                                                                          | Min.              | 1                             | 0.5mm <sup>2</sup>                              | Copper               |
| solid wire                                                                          | Min.              | 2                             | 0.5mm <sup>2</sup>                              | Copper               |
| flexible wire                                                                       | Min.              | 1                             | 0.75mm <sup>2</sup>                             | Copper               |
| flexible wire                                                                       | Min.              | 2                             | 0.75mm <sup>2</sup>                             | Copper               |
| flexible wire                                                                       | Max.              | 2                             | 2.5mm <sup>2</sup>                              | Copper               |
| flexible wire                                                                       | Max.              | 2                             | AWG 14                                          | Copper               |
| Single-core or stranded wire                                                        | Max.              | 2                             | AWG 12                                          | Copper               |
| Single-core or stranded wire                                                        | Max.              | 2                             | 2.5mm <sup>2</sup>                              | Copper               |
| flexible wire with ferrule according to DIN 46228                                   | Max.              | 2                             | 2.5mm <sup>2</sup>                              | Copper               |
| flexible wire with ferrule according to DIN 46228                                   | Min.              | 1                             | 0.5mm <sup>2</sup>                              | Copper               |
| flexible wire with ferrule according to DIN 46228                                   | Min.              | 2                             | 0.5mm <sup>2</sup>                              | Copper               |
| Stripping length                                                                    |                   |                               |                                                 |                      |
| Length (mm) –                                                                       |                   |                               |                                                 |                      |
|  |                   |                               |                                                 |                      |
| Recommended screw driver                                                            |                   |                               |                                                 |                      |
| Type of screw driver                                                                | Value             |                               |                                                 |                      |
| Cross Screwdriver                                                                   | PH1               |                               |                                                 |                      |
| Slot screwdriver according to DIN 5264                                              | 0,8x4             |                               |                                                 |                      |
| Tightening torque of screws                                                         |                   |                               |                                                 |                      |
| tightening torque (Nm)                                                              |                   |                               | tightening torque (lb-in)                       |                      |
| 0.60                                                                                |                   |                               | 5                                               |                      |

## General Information

### Text

- Do not lubricate or treat contacts.
- Switches may only be mounted, connected and set into operation by qualified persons according to the accepted rules of technology.
- Use copper wire only. Do not coat the wire end with tin.

|    |    |
|----|----|
| 13 | 21 |
| 14 | 22 |