



Sample image

## KG20

Classification Contact: Rigid contact bridge

Classification Contact Mat: Silver

Classification Terminal: Screw terminal

Contact development: T303

Type of mounting: VE

Reference number: KG20.T103/NL-EXBC.\*KNBOX

### 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	
25	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		20
Rated operational power				
Utilization category	Voltage (V)	No. of phases	No. of poles	Power (kW)
AC-3	220 - 240	3	3	4
AC-3	380 - 440	3	3	5,50
AC-3	660 - 690	3	3	5,50
AC-23A	220 - 240	3	3	5,50
AC-23A	380 - 440	3	3	7,50
AC-23A	660 - 690	3	3	7,50
Max. Fuse rating IEC				
Fuse characteristic		No. of Fuses		Current (A)
gG		1		35

### UL60947-4-1, UL508

Horsepower rating						
Across-the-Line Motor Starting	Voltage (V)	No. of phases	No. of poles	Power (HP)	Ambient temperature [°C]	
DOL	200 - 240	3	3	7,50	40	
SCCR / Max. fuse rating						
Conditions of acceptability						
This device is suitable for use on circuits capable of delivering not more than 10kA rms symmetrical amperes, 600V ac max. when protected by Type RK1 fuses.						
Suitable for use on a circuit capable of delivering not more than 65000 rms symmetrical amperes at 600V max., when protected by 40A Class J fuses.						
Temp. rating of wire						
Temperature rating (°C)		Current (A)		Text		
60 - 75		--		--		

### 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.

### 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	
25		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	1
					40

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

Pilot duty rating code					
Duty Code					
A600					

General Use					
AC / DC	Voltage (V)	Current (A)	No. of phases	No. of poles	No. of contacts in series
AC	277	25	1	1	1
AC	600	25	1	2	1
AC	600	25	3	3	1

## CSA

Horsepower rating					
Across-the-Line Motor Starting	Voltage (V)	No. of phases	No. of poles	Power (HP)	Ambient temperature [°C]
DOL	220 - 240	3	3	7,50	40

Temp. rating of wire					
Temperature rating (°C)		Current (A)		Text	
75		--		--	

## 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	0.75mm²	Copper	
Solid wire	Min.	2	0.5mm²	Copper	
Flexible wire	Min.	2	0.75mm²	Copper	
Flexible wire	Max.	1	AWG 10	Copper	
Flexible wire	Max.	1	4mm²	Copper	
Flexible wire	Min.	1	1.5mm²	Copper	
Single-core or stranded wire	Max.	1	6mm²	Copper	
Single-core or stranded wire	Max.	1	AWG 10	Copper	
Flexible wire with sleeve	Max.	1	4mm²	Copper	
Flexible wire with ferrule according to DIN 46228	Min.	1	0.75mm²	Copper	
Flexible wire with ferrule according to DIN 46228	Min.	2	0.5mm²	Copper	

Stripping length	
Length (mm)	--




Recommended screw driver	
Type of screw driver	Value
Cross Screwdriver	PH2
Slot screwdriver according to DIN 5264	0,8x4

Tightening torque of screws	
tightening torque (Nm)	tightening torque (lb-in)
1,25	11

General Information	
Text	

- Use only copper wires with or without tinned/silver-plated individual wires. Soldering the end of the wire before wiring is not allowed.
- EMC Note: This device is suitable for use in environment A and B.
- Terminals with factory fitted jumper links are tightened during production for loss prevention. When opening the terminal clamps, make sure that no factory fitted links get lost and that all wire connections are properly seated.
- After wiring, ALL terminal screws must be tightened to the specified torque values.
- 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.

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 [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

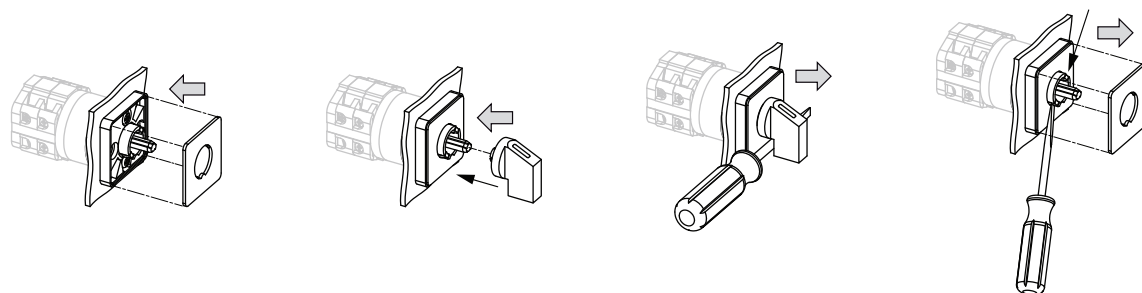
Classification Contact: Rigid contact bridge

Classification Contact Mat: Silver

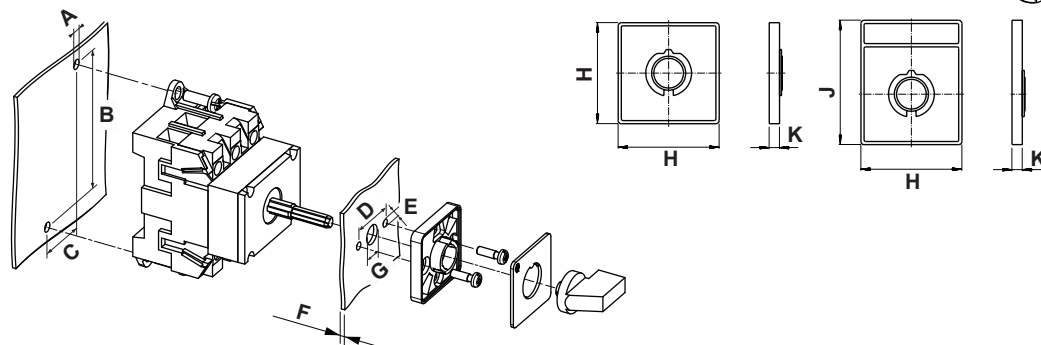
Classification Terminal: Screw terminal

Mounting-VE

Mounting-VE



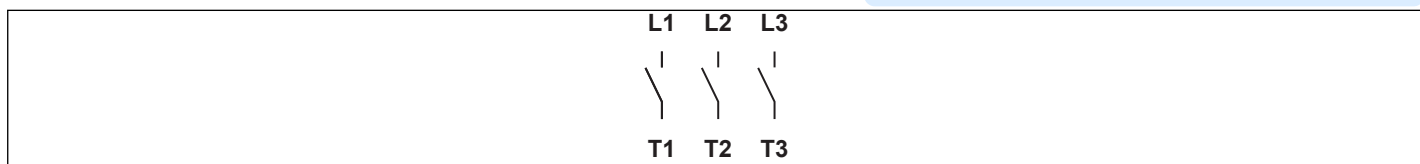
BF\_KG20\_VE\_FP



IP - Code front side		IP40
Stages		1,00 - 5,00
A	Ø	4,10 mm
B	H	60,00 mm
B_tol.	H	± 0,50 mm
C	H	22,00 mm
C_tol.	H	± 0,50 mm
D	H	20,00 mm
E	Ø	3,20 mm
F	H	<= 12,00 mm
G	Ø	8,00 - 11,00 mm
H	H	30,00 mm
J	H	39,00 mm
K	H	5,50 mm

## Wiring diagram

KG20.T303.VE



**M510A-1**
**K0.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**

Nominal Voltage				
			Voltage (V)	AC / DC
			500	AC
			690	AC
Rated uninterrupted current I <sub>u</sub> /I <sub>th</sub>				
Current (A)	Ambient temperature (°C)	Peak temperature (°C)	additional requirements	
10	55	60	Ambient temperature +55°C during 24 hours with peaks up to +60°C	
16	55	60	Ambient temperature +55°C during 24 hours with peaks up to +60°C	
Rated operational current I <sub>e</sub>				
Utilization category			Voltage (V)	Current (A)
AC-15			110 - 240	2,50
AC-15			380 - 440	1,50
AC-15			500	1
AC-21A			500	10

**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		
	10	0 - 40	--		
Pilot duty rating code					
Duty Code					
A600					
General Use					
AC / DC	Voltage (V)	Current (A)	No. of phases	No. of poles	No. of contacts in series
AC	600	10	1	1	

**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	AWG 16	Copper
Flexible wire	Max.	2	1.5mm <sup>2</sup>	Copper
Single-core or stranded wire	Max.	2	AWG 14	Copper
Single-core or stranded wire	Max.	2	1.5mm <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	Max.	2	1mm <sup>2</sup>	Copper
Flexible wire with ferrule according to DIN 46228	Min.	2	0.5mm <sup>2</sup>	Copper
Stripping length				
	Length (mm)	--		
	6			
Recommended screw driver				
Type of screw driver	Value			
Cross Screwdriver	PH1			

Recommended screw driver		
Type of screw driver	Value	
Slot screwdriver according to DIN 5264	0,6x3,5	
Tightening torque of screws		
	tightening torque (Nm)	tightening torque (lb-in)
	0,60	5

General Information	
Text	
<ul style="list-style-type: none"> <li>- Use only copper wires with or without tinned/silver-plated individual wires. Soldering the end of the wire before wiring is not allowed.</li> <li>- Terminals with factory fitted jumper links are tightened during production for loss prevention. When opening the terminal clamps, make sure that no factory fitted links get lost and that all wire connections are properly seated.</li> <li>- After wiring, ALL terminal screws must be tightened to the specified torque values.</li> <li>- Do not lubricate or treat contacts.</li> <li>- Switches may only be mounted, connected and set into operation by qualified persons according to the accepted rules of technology.</li> </ul>	

### M510A-1 AUXILIARY CONTACTS (cam operated) for switch type KG20 - KG100C and KH(R)16 - KH(R)25B K0.M510A/2CA-B

