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Sample image

Datasheet

Article number: 70009947
Designation: KG64.T103/40.KL11V
Description: Switchgear

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

Rated insulation voltage Ui

Voltage (V)	AC / DC
690	AC

Rated impulse withstand voltage Uimp

Voltage (kV)	Overvoltage category	Pollution degree	Supply system	Function
6	III	3	Valid for lines with grounded common neutral termination	Switch / Switch disconnector

Rated uninterrupted current Iu/Ith

Current (A)	Ambient temperature (°C)	Peak temperature (°C)	additional requirements
63	50	55	Ambient temperature +50°C during 24 hours with peaks up to +55°C

Conventional enclosed thermal current Ithe

Current (A)	Ambient temperature (°C)	Peak temperature (°C)	Additional requirements	No. of stages (from - to)	Mounting	Mounting size
63	35	40	Ambient temperature +35°C during 24 hours with peaks up to +40°C	--	--	--

Rated operational current Ie

Utilization category	Voltage (V)	Current (A)
AC-32A	20 - 400	63
AC-20A	690	63
AC-21A	20 - 690	63
AC-22A	220 - 500	63
AC-22A	660 - 690	55

Rated operational power

Utilization category	Voltage (V)	No. of phases	No. of poles	Power (kW)
AC-3	220 - 240	3	3	11
AC-3	380 - 440	3	3	18,50
AC-3	500 - 500	3	3	22
AC-3	660 - 690	3	3	15
AC-23A	220 - 240	3	3	11
AC-23A	380 - 440	3	3	22
AC-23A	500 - 500	3	3	30
AC-23A	660 - 690	3	3	18,50

Max Fuse Rating IEC

Fuse characteristic	No. of Fuses	Current (A)
gG	1	63

Tested AC and DC values

Utilization category / Time constant	No. of contacts in series	Off or change-over switch	Voltage (V)	AC / DC	Current (A)
DC-21B	1	ON - OFF	24	DC	63
DC-21B	2	ON - OFF	48	DC	63

Rated conditional short-circuit current

Current (kA)	Text	cut-off current Ic (kA)	Durchlassenergie I²t (kA²s)
15	--	5,10	17,57

Rated breaking capacity

Voltage (V)	Current (A)	Utilization category / UL (DOL)
220 - 240	350	--
380 - 440	350	--
660 - 690	190	--

Rated short-circuit making capacity Icm

Current (A)
3000

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
60	0 - 40	--

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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	3	40
DOL	220 - 240	1	2	7,50	40
DOL	277 - 277	1	2	7,50	40
DOL	415 - 415	1	2	10	40
DOL	440 - 480	1	2	15	40
DOL	550 - 600	1	2	15	40
DOL	110 - 120	3	3	5	40
DOL	220 - 240	3	3	15	40
DOL	415 - 415	3	3	20	40
DOL	440 - 480	3	3	30	40
DOL	550 - 600	3	3	40	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 600V max., when protected by 70A Class J fuses.

Temp. rating of wire

Temperature rating (°C)	*Current (A)*	*Text*
60 - 75	--	--

General Use

AC / DC	*Voltage (V)*	*Current (A)*	*No. of phases*	*No. of poles*	*No. of contacts in series*
AC	277	60	1	1	1
AC	600	60	1	2	1
AC	600	60	3	3	1

Suitable as Motor disconnect

Yes/No	*MOTOR-DISCONNECT-UL/CSA Text*
Y	--

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 disconnector 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*
60	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	3	40
DOL	220 - 240	1	2	7,50	40
DOL	277 - 277	1	2	7,50	40
DOL	415 - 415	1	2	10	40
DOL	440 - 480	1	2	15	40
DOL	550 - 600	1	2	15	40
DOL	110 - 120	3	3	5	40
DOL	220 - 240	3	3	15	40
DOL	415 - 415	3	3	20	40
DOL	440 - 480	3	3	30	40
DOL	550 - 600	3	3	40	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	60	1	1	1
AC	600	60	1	2	1
AC	600	60	3	3	1

Suitable as Motor disconnect

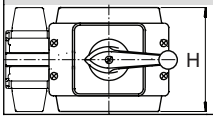
Yes/No	*MOTOR-DISCONNECT-UL/CSA Text*
Y	SUITABLE FOR MOTOR DISCONNECT.

MASTER DATA

Max. number of stages

number of stages	*Modul*
4	KO

Switch Measures

Picture name	*B*	*F*	*H*	*H1*	*H2*	*H3*
	--	--	64	--	--	--

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GENERAL TECHNICAL INFORMATION

Minimal ratings (voltage/current)

Voltage (V)	Current (mA)	Environment conditions	Environment conditions 2	Environment conditions 3
24	500	Ambient air must be free of particular contamination with sulfur and/or sulfurous components such as H2S etc.	In case extraordinary contamination with dust is expected an adequate dust protection is required.	--

Rated short-time withstand current Icw

Time (s)	Current (A)
1	580

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.	2	0.75mm²	Copper
solid wire	Min.	1	1.5mm²	Copper
flexible wire	Max.	1	AWG 6	Copper
flexible wire	Min.	1	2.5mm²	Copper
flexible wire	Max.	1	10mm²	Copper
flexible wire	Min.	2	1.5mm²	Copper
Single-core or stranded wire	Max.	1	AWG 6	Copper
Single-core or stranded wire	Max.	1	16mm²	Copper
flexible wire with sleeve	Max.	1	10mm²	Copper
flexible wire with ferrule according to DIN 46228	Min.	2	0.75mm²	Copper
flexible wire with ferrule according to DIN 46228	Min.	1	1.5mm²	Copper

Stripping length

Length (mm)	--
12	

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)
1,80	16

Power loss per pole

Power (W)
2,20

Mechanical life

No. of operating cycles	Ambient temperature (°C)	Number of stages	Limitations
150000	-5 - 55	--	Valid for manual operation. Valid for switches without optional extras. The value refers to the mechanics of the device, for lifetime of the electrical contacts please refer to "electrical life values". One operating cycle means 0-1-0.

Electrical life (B10-Value)

Utilization category	cos(φ)	Time constant (ms)	Voltage (V)	Current (A)	No. of operations	number of series contacts	AC/DC	No. of phases	No. of poles
--	0,64	--	220	20	200000	1	AC	1	1
--	0,65	--	380	20	200000	1	AC	1	1
AC-23	--	--	500	45	94000	1	AC	3	3
AC-22	--	--	500	63	50000	1	AC	3	3
AC-23	--	--	690	22,40	150000	1	AC	3	3
--	--	50	60	2	100000	1	DC	1	1
--	--	55	110	1,50	75000	1	DC	1	1

Degree of protection

IP - Code switch terminal
IP20

Conditions during transport and storing

Minimum temperature (°C)	Maximum temperature (°C)	additional requirements
-40	85	In case of temperatures below -5°C no shock load permissible

Shock / Vibration

Type of oscillation	Values
Resistance to vibration	Min. 4g, 2-100Hz, 1,6mm
Resistance to shock	min. 6g, 6ms

General Information

Text

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

Creepage distance

Distance (mm)
12,70

Clearance

Distance (mm)
12,70

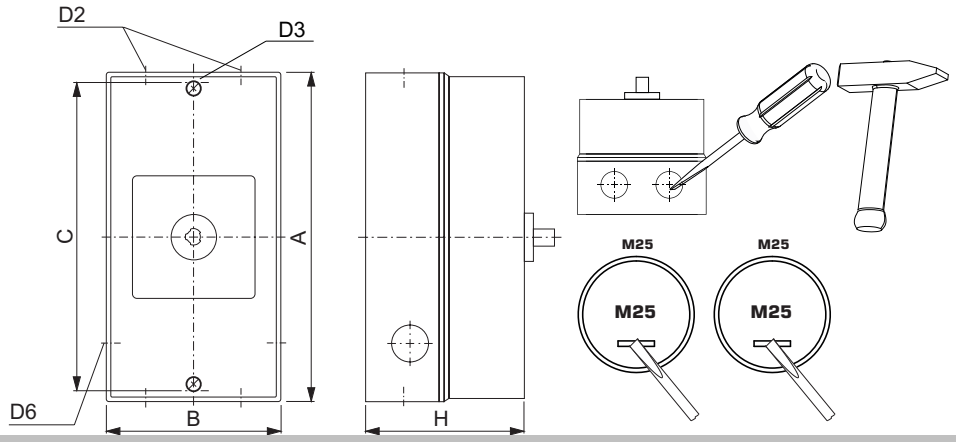
Operating temperature

Min. Temperature [°C]	Max. Temperature [°C]
-5	55

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 www.krausnaimer.com
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.

Classification Contact: Rigid contact bridge
Classification Contact Mat: Silver
Classification Terminal: Screw terminal

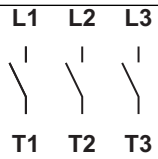
Mounting-KL11V



IP - Code front side		IP66, IP67, IP69k
Stages		1,00 - 5,00
A	⊢	190,00 mm
B	⊢	100,00 mm
C	⊢	178,00 mm
D2	⌀	4,00 x M25
D3	⌀	5,60 mm
D6	⌀	2,00 x M25
H	⊢	93,00 mm

Wiring diagram

KG64.T303.KL11V



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Switch program

KG64.T303.KL11V

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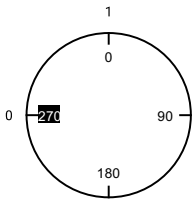
KG64	T303	Page 1 of 1

Face Plate



Switching Angle 90
Total switching Angle 90

		L1	L2	L3					
		1	3	5	7	9	11	13	15
		2	4	6	8	10	12	14	16
		T1	T2	T3					
0	270								
1	0	■	■	■					
	90								
	180								

Version: 102

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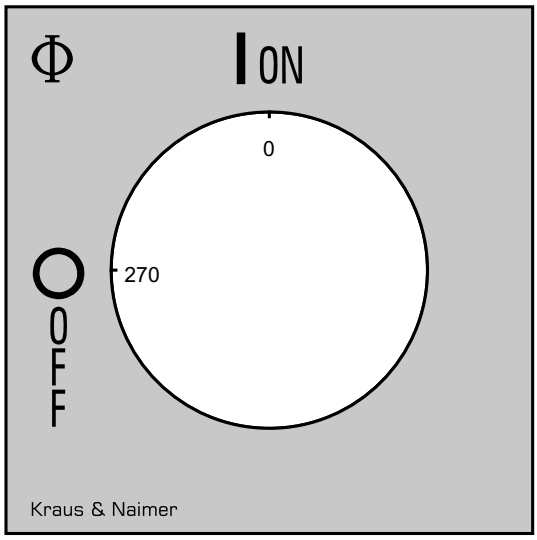
Face plate

S1.F656/C10.V9



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AUXILIARY CONTACTS

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

Designation: K1.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*
690	AC

Rated uninterrupted current Iu/Ith

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

Conventional enclosed thermal current Ithe

Current (A)	*Ambient temperature (°C)*	*Peak temperature (°C)*	*Additional requirements*	*No. of stages (from - to)*	*Mounting*	*Mounting size*
16	35	40	Ambient temperature +35°C during 24 hours with peaks up to +40°C	--	--	--

Rated operational current Ie

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

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	1

GENERAL TECHNICAL INFORMATION

Minimal ratings (voltage/current)

Voltage (V)	*Current (mA)*	*Environment conditions*	*Environment conditions 2*	*Environment conditions 3*
20	5	Ambient air must be free of particular contamination with sulfur and/or sulfurous components such as H2S etc.	In case extraordinary contamination with dust is expected an adequate dust protection is required.	--

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	0.5mm²	Copper
solid wire	Min.	2	0.5mm²	Copper
flexible wire	Min.	1	0.75mm²	Copper
flexible wire	Min.	2	0.75mm²	Copper
flexible wire	Max.	2	2.5mm²	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	2.5mm²	Copper
flexible wire with ferrule according to DIN 46228	Max.	2	2.5mm²	Copper
flexible wire with ferrule according to DIN 46228	Min.	1	0.5mm²	Copper
flexible wire with ferrule according to DIN 46228	Min.	2	0.5mm²	Copper

Stripping length

Length (mm)	--
8	

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

Power loss per pole
Power (W)
0,60

Degree of protection
IP - Code switch terminal
IP20

Conditions during transport and storing		
Minimum temperature (°C)	*Maximum temperature (°C)*	*additional requirements*
-40	85	In case of temperatures below -5°C no shock load permissible

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.