



# Kraus & Naimer

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## Switch Disconnectors for Photovoltaic Systems



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DC SWITCH-DISCONNECTOR SELECTION TABLES - UTILISATION CATEGORY DC-21B

SINGLE STRING

Page	450V	500V	650V	800V	920V	1000V	Order code
2	25A	21A	20A	18A	11A		<b>KG20 T104/D-P003 KL51V</b>
2	28A	28A	25A	23A	15A	12A	<b>KG32 T104/D-P003 KL51V</b>
2	40A						<b>KG41 T104/D-P003 KL11V</b>
3				21A		20A	<b>KG20B T106/D-P003 KL11V</b>
3			27A	27A		25A	<b>KG32B T106/D-P003 KL11V</b>
3		40A	40A	28A			<b>KG41B T106/D-P003 KL11V</b>
4						26A	<b>KG32B T108/D-P003 KL11V</b>
4					40A	35A	<b>KG41B T108/D-P003 KL11V</b>
5	60A	60A	60A				<b>KG80C T106/D-P003 STM</b>
5				60A			<b>KG80C T108/D-P003 STM</b>



TWO STRING - RATINGS PER STRING

Page	220V	280V	340V	400V	460V	500V	Order code
6	25A	21A	20A	18A	11A		<b>KG20 T104/GB-P103 KL51V</b>
6	28A	28A	25A	23A	15A	12A	<b>KG32 T104/GB-P103 KL51V</b>
6	40A						<b>KG41 T104/GB-P103 KL11V</b>
Page	330V	420V	510V	600V	690V	750V	Order code
7	25A	21A	20A	18A	11A		<b>KG20B T106/GB-P103 KL11V</b>
7	27A	27A	25A	23A	15A	12A	<b>KG32B T106/GB-P103 KL11V</b>
7	40A	28A					<b>KG41B T106/GB-P103 KL11V</b>
Page	440V	560V	680V	800V	920V	1000V	Order code
8	25A	21A	20A	18A	11A		<b>KG20B T108/GB-P103 KL11V</b>
8	26A	26A	25A	23A	15A	12A	<b>KG32B T108/GB-P103 KL11V</b>
8	40A	28A					<b>KG41B T108/GB-P103 KL11V</b>



AC SWITCH-DISCONNECTOR SELECTION TABLE

Operational current AC-21A	Insulation voltage Ui	3 POLE Order code	Page	4 POLE Order code	Page
25A	690V	<b>KG20 T203/GBA270 *KS1V</b>	10	<b>KG20 T204/GBA290 *KS1V</b>	11
25A	690V	<b>KG20 T203/GBA294 *KL†</b>	10	<b>KG20 T204/GBA486 KL51V†</b>	11
32A	690V	<b>KG32 T203/GBA294 *KL†</b>	10	<b>KG32 T204/GBA486 KL51V†</b>	11
40A	690V	<b>KG41 T203/GBA270 *KL1V</b>	10	<b>KG41 T204/GBA290 *KL1V</b>	11

† Larger enclosure to match KG20/32 T104 DC enclosure



UTILISATION CATEGORY

DC-21 is a utilisation category which relates to the switching of resistive loads including moderate overloads.

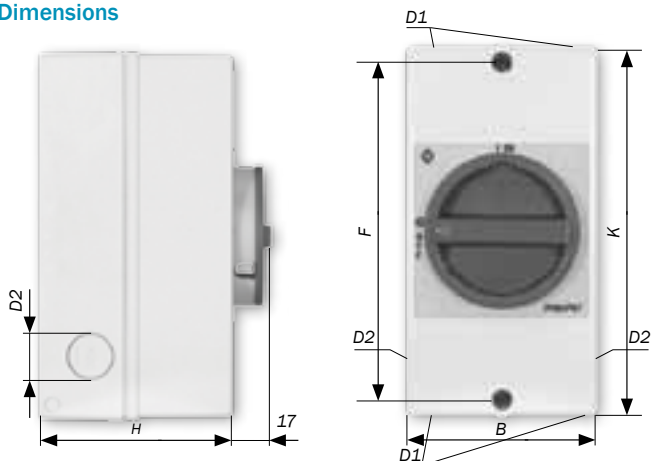
The designation of utilisation categories is completed by the suffix A or B according to whether the intended applications require frequent or infrequent operations.

Utilisation categories with suffix B are appropriate for devices which, due to design or application, are only intended for infrequent operation. This could apply, for example, to switch-

disconnectors normally only operated to provide isolation for maintenance work.

Please select the correct switch-disconnector according to the maximum voltage and current output of all upstream PV modules, this must include all corrective factors according to relevant standards.

**Dimensions**

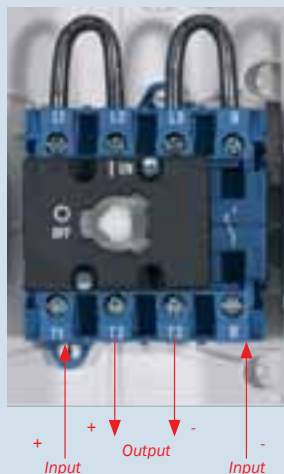


	<b>KG20/KG32</b>	<b>KG41</b>
B	85	100
D1	4 x Ø 20	4 x Ø 25
D2	2 x Ø 20	2 x Ø 25
F	150	178
H	82	93
K	160	190

**Mounting**

- Insulated enclosure, protection IP66/67, Class II insulation, knock-out entries, black handle and contrasting grey escutcheon plate, OFF-position lockable with padlocks, switch interlocked with lid to prevent opening in 'ON' position, optional Red/Yellow handle available for use as Main/Emergency Off DC Switch-Disconnecter.

**Connection Guide**



<b>Connecting diagram</b>	<b>Tightening torque for terminal screws</b>	<b>Strip length</b>
	KG20/ KG32      1,25Nm	KG20/ KG32      9
	KG41      1,80Nm	KG41      10

**Maximum permissible wire gauge (use copper wire only)**  
 Single core wire or stranded wire    KG20/KG32:6mm<sup>2</sup>    KG41:16mm<sup>2</sup>  
 Flexible wire                                    KG20/KG32:4mm<sup>2</sup>    KG41:10mm<sup>2</sup>



DC Switch-Disconnectors for solar photovoltaic (PV) power supply system acc. to IEC 60364-7-712:2002.

**General Data**

- Switch-Disconnectors according to EN 60947-3 respectively VDE part 107
- Utilisation Category:  
DC-21B for Photovoltaic application
- Ambient Temperature:  
50°C during 24 hours with peaks up to 55°C
- Terminals:  
Finger-proof according to VDE 0660-514 and BGV A3, IP 20
- Insulation Voltage: 1000V
- 2 Pole, 4 contacts (2x2 in series)

**Rated Value & Order Number**

<b>Operational voltage</b>	<b>Operational current</b>	<b>Order number</b>
450V	25A	<b>KG20 T104/D-P003 KL51V</b>
450V	40A	<b>KG41 T104/D-P003 KL11V</b>
500V	21A	<b>KG20 T104/D-P003 KL51V</b>
500V	28A	<b>KG32 T104/D-P003 KL51V</b>
650V	20A	<b>KG20 T104/D-P003 KL51V</b>
650V	25A	<b>KG32 T104/D-P003 KL51V</b>
800V	18A	<b>KG20 T104/D-P003 KL51V</b>
800V	23A	<b>KG32 T104/D-P003 KL51V</b>
920V	11A	<b>KG20 T104/D-P003 KL51V</b>
920V	15A	<b>KG32 T104/D-P003 KL51V</b>
1000V	12A	<b>KG32 T104/D-P003 KL51V</b>

Data valid only if the pre-assembled jumpers have not been modified.



DC Switch-Disconnectors for solar photovoltaic (PV) power supply system acc. to IEC 60364-7-712:2002.

**General Data**

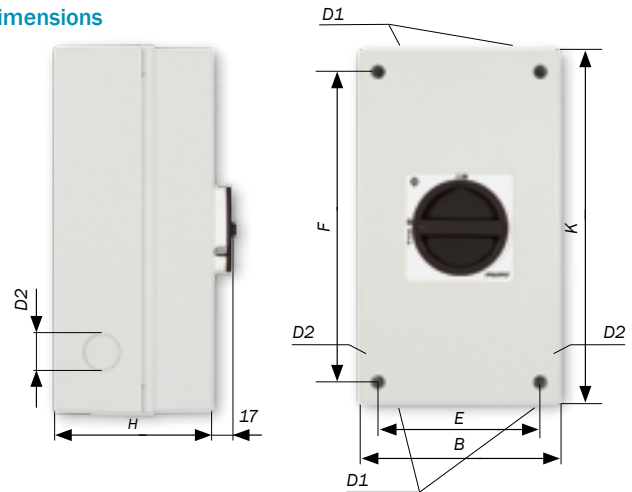
- Switch-Disconnectors according to EN 60947-3 respectively VDE 0660 part 107
- Utilisation Category: DC-21B for Photovoltaic application
- Ambient Temperature: 50°C during 24 hours with peaks up to 55°C
- Terminals: Finger-proof according to VDE 0660-514 and BGV A3, IP 20
- Insulation Voltage: 1000V
- 2 Pole, 6 contacts (2x3 in series)

**Rated Value & Order Number**

Operational voltage	Operational current	Order number
500V	40A	<b>KG41B T106/D-P003 KL11V</b>
650V	27A	<b>KG32B T106/D-P003 KL11V</b>
650V	40A	<b>KG41B T106/D-P003 KL11V</b>
800V	21A	<b>KG20B T106/D-P003 KL11V</b>
800V	27A	<b>KG32B T106/D-P003 KL11V</b>
800V	28A	<b>KG41B T106/D-P003 KL11V</b>
1000V	20A	<b>KG20B T106/D-P003 KL11V</b>
1000V	25A	<b>KG32B T106/D-P003 KL11V</b>

Data valid only if the pre-assembled jumpers have not been modified.

**Dimensions**

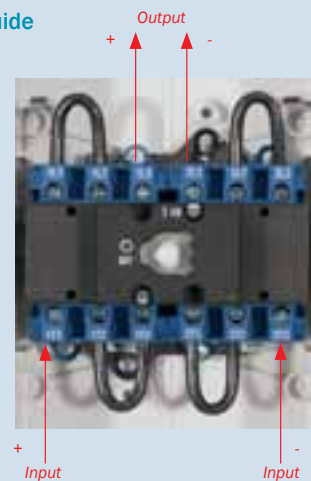


	<b>KG20B/KG32B</b>	<b>KG41B</b>
B	100	145
E	-	124
D1	4 x Ø 25	4 x Ø 25
D2	2 x Ø 25	2 x Ø 25
F	178	229
H	93	107
K	190	250

**Mounting**

- Insulated enclosure, protection IP66/67, Class II Insulation, knock-out entries, black handle and contrasting grey escutcheon plate, OFF-position lockable with padlocks, switch interlocked with lid to prevent opening in 'ON' position, optional Red/Yellow handle available for use as Main/Emergency Off DC Switch-Disconnector.

**Connection Guide**

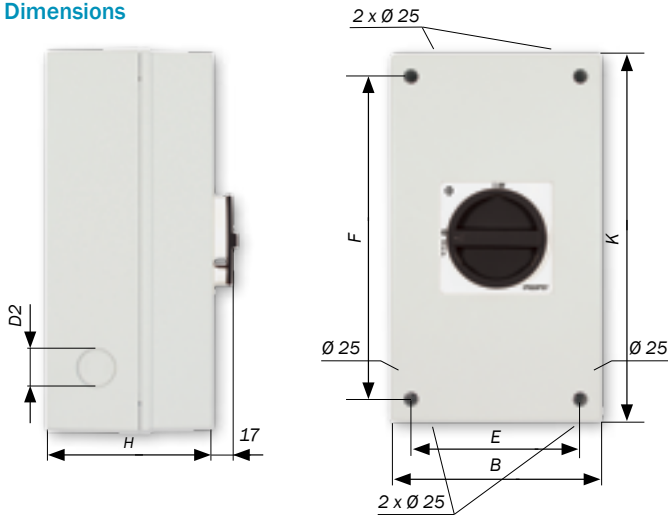


Connecting diagram	Tightening torque for terminal screws	Strip length
	KG20B/ KG32B 1,25Nm	KG20B/ KG32B 9
	KG41B 1,80Nm	KG41B 10

**Maximum permissible wire gauge (use copper wire only)**

Single core wire or stranded wire KG20B/KG32B:6mm<sup>2</sup> KG41B:16mm<sup>2</sup>  
Flexible wire KG20B/KG32B:4mm<sup>2</sup>KG41B:10mm<sup>2</sup>

**Dimensions**



	<b>KG32B/KG41B</b>
B	145
E	124
F	229
H	107
K	250

**Mounting**

- Insulated enclosure, protection IP66/67, Class II insulation, knock-out entries, black handle and contrasting grey escutcheon plate, OFF-position lockable with padlocks, switch interlocked with lid to prevent opening in 'ON' position, optional Red/Yellow handle available for use as Main/Emergency Off DC Switch-Disconnector.

**Connection Guide**

Connecting diagram	Tightening torque for terminal screws	Strip length
	KG32B 1,25Nm	KG32B <sup>9</sup>
	KG41B 1,80Nm	KG41B <sup>10</sup>

**Maximum permissible wire gauge (use copper wire only)**

Single core wire or stranded wire	KG32B:6mm <sup>2</sup>	KG41B:16mm <sup>2</sup>
Flexible wire	KG32B:4mm <sup>2</sup>	KG41B:10mm <sup>2</sup>



DC Switch-Disconnectors for solar photovoltaic (PV) power supply system acc. to IEC 60364-7-712:2002.

**General Data**

- Switch-Disconnectors according to EN 60947-3 respectively VDE 0660 part 107
- Utilisation Category: DC-21B for Photovoltaic application
- Ambient Temperature: 50°C during 24 hours with peaks up to 55°C
- Terminals: Finger-proof according to VDE 0660-514 and BGV A3, IP 20
- Insulation Voltage: 1000V
- 2 Pole, 8 contacts (2x4 in series)

**Rated Value & Order Number**

Operational voltage	Operational current	Order number
880V	40A	<b>KG41B T108/D-P003 KL11V</b>
920V	40A	<b>KG41B T108/D-P003 KL11V</b>
1000V	26A	<b>KG32B T108/D-P003 KL11V</b>
1000V	35A	<b>KG41B T108/D-P003 KL11V</b>

Data valid only if the pre-assembled jumpers have not been modified.



DC Switch-Disconnectors for solar photovoltaic (PV) power supply system acc. to IEC 60364-7-712:2002.

**General Data**

- Switch-Disconnectors according to EN 60947-3 respectively VDE 0660 part 107
- Utilisation Category: DC-21B for Photovoltaic application
- Ambient Temperature: 50°C during 24 hours with peaks up to 55°C
- Terminals: Finger-proof according to VDE 0660-514 and BGV A3, IP 20
- Insulation Voltage: 1000V
- T106 – 2 Pole, 6 contacts (2x3 in series)
- T108 – 2 Pole, 8 contacts (2x4 in series)

**Rated Value & Order Number**

Operational voltage	Operational current	Order number
450V	60A	<b>KG80C T106/D-P003 STM</b>
500V	60A	<b>KG80C T106/D-P003 STM</b>
650V	60A	<b>KG80C T106/D-P003 STM</b>
800V	60A	<b>KG80C T108/D-P003 STM</b>

Data valid only if the pre-assembled jumpers have not been modified.

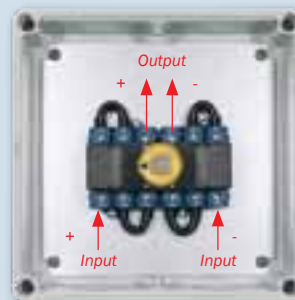
**Dimensions**



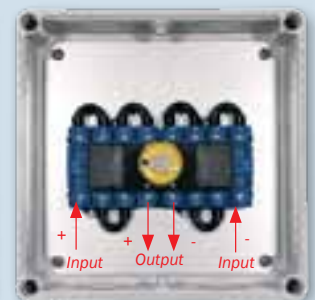
**Mounting**

- Insulated enclosure, protection IP66/67, Class II Insulation, black handle and contrasting grey escutcheon plate, OFF-position lockable with padlocks, switch interlocked with lid to prevent opening in 'ON' position, optional Red/Yellow handle available for use as Main/Emergency-Off DC Switch-Disconnecter.

**Connection Guide**



Contact development: 2 pole  
6 contact per circuit  
(2 x 3 in series)



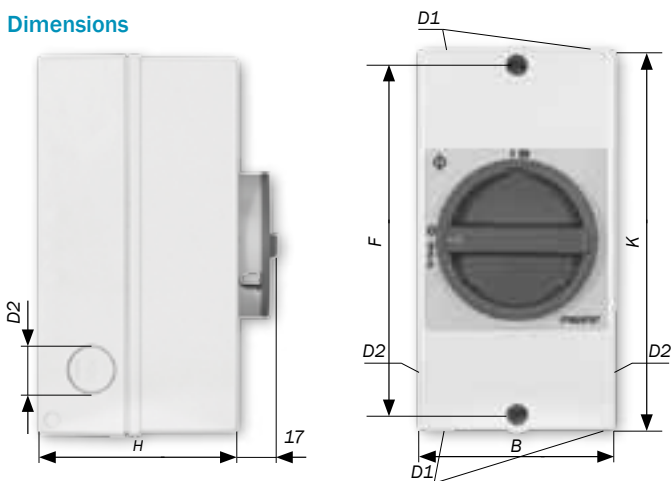
Contact development: 2 pole  
8 contact per circuit  
(2 x 4 in series)

Connecting diagram 6 contacts	Connecting diagram 8 contacts	Tightening torque for terminal screws	Strip length
		KG80C 3,00Nm	KG80C

**Maximum permissible wire gauge (use copper wire only)**

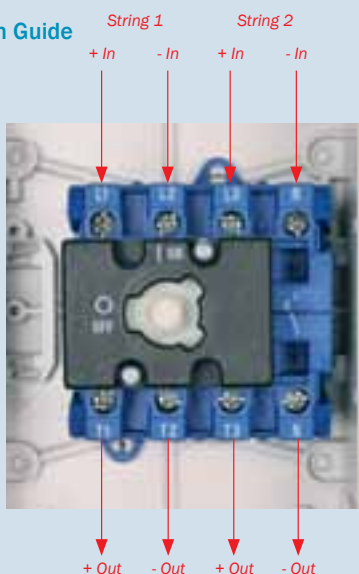
Single core wire or stranded wire KG80C:50mm<sup>2</sup>  
Flexible wire KG80C:35mm<sup>2</sup>

**Dimensions**



	<b>KG20/KG32</b>	<b>KG41</b>
B	85	100
D1	4 x Ø 20	4 x Ø 25
D2	2 x Ø 20	2 x Ø 25
F	150	178
H	82	93
K	160	190

**Connection Guide**



<b>Connecting diagram</b>	<b>Tightening torque for terminal screws</b>	<b>Strip length</b>																				
<table border="0"> <tr> <td>String 1</td> <td>String 2</td> </tr> <tr> <td>In In</td> <td>In In</td> </tr> <tr> <td>+ -</td> <td>+ -</td> </tr> <tr> <td>↓ ↓</td> <td>↓ ↓</td> </tr> <tr> <td>L1 L2</td> <td>L3 N</td> </tr> <tr> <td>⎓ ⎓</td> <td>⎓ ⎓</td> </tr> <tr> <td>T1 T2</td> <td>T3 N</td> </tr> <tr> <td>↓ ↓</td> <td>↓ ↓</td> </tr> <tr> <td>+ -</td> <td>+ -</td> </tr> <tr> <td>Out Out</td> <td>Out Out</td> </tr> </table>	String 1	String 2	In In	In In	+ -	+ -	↓ ↓	↓ ↓	L1 L2	L3 N	⎓ ⎓	⎓ ⎓	T1 T2	T3 N	↓ ↓	↓ ↓	+ -	+ -	Out Out	Out Out	<p>KG20/ KG32 1,25Nm</p> <p>KG41 1,80Nm</p>	<p>KG20/ 9</p> <p>KG32</p> <p>KG41 10</p>
String 1	String 2																					
In In	In In																					
+ -	+ -																					
↓ ↓	↓ ↓																					
L1 L2	L3 N																					
⎓ ⎓	⎓ ⎓																					
T1 T2	T3 N																					
↓ ↓	↓ ↓																					
+ -	+ -																					
Out Out	Out Out																					

**Maximum permissible wire gauge (use copper wire only)**  
 Single core wire or stranded wire KG20/KG32:6mm<sup>2</sup> KG41:16mm<sup>2</sup>  
 Flexible wire KG20/KG32:4mm<sup>2</sup> KG41:10mm<sup>2</sup>



DC Switch-Disconnectors for solar photovoltaic (PV) power supply system acc. to IEC 60364-7-712:2002.

**General Data**

- Switch-Disconnectors according to EN 60947-3 respectively VDE 0660 part 107
- Utilisation Category: DC-21B for Photovoltaic application
- Ambient Temperature: 50°C during 24 hours with peaks up to 55°C
- Terminals: Finger-proof according to VDE 0660-514 and BGV A3, IP 20
- 4 Pole, 2x2 contacts per string

**Mounting**

- Insulated enclosure, protection IP66/67, Class II Insulation, knock-out entries, black handle and contrasting grey escutcheon plate, OFF-position lockable with padlocks, switch interlocked with lid to prevent opening in 'ON' position, optional Red/Yellow handle available for use as Main/Emergency-Off DC Switch-Disconnector.

**Rated Value & Order Number**

<b>Operational voltage</b>	<b>Operational current</b>	<b>Order number</b>
220V	25A	<b>KG20 T104/GB-P103 KL51V</b>
220V	40A	<b>KG41 T104/GB-P103 KL11V</b>
280V	21A	<b>KG20 T104/GB-P103 KL51V</b>
280V	28A	<b>KG32 T104/GB-P103 KL51V</b>
340V	20A	<b>KG20 T104/GB-P103 KL51V</b>
340V	25A	<b>KG32 T104/GB-P103 KL51V</b>
400V	18A	<b>KG20 T104/GB-P103 KL51V</b>
400V	23A	<b>KG32 T104/GB-P103 KL51V</b>
460V	11A	<b>KG20 T104/GB-P103 KL51V</b>
460V	15A	<b>KG32 T104/GB-P103 KL51V</b>
500V	12A	<b>KG32 T104/GB-P103 KL51V</b>

Data valid only if the pre-assembled jumpers have not been modified.



DC Switch-Disconnectors for solar photovoltaic (PV) power supply system acc. to IEC 60364-7-712:2002.

**General Data**

- Switch-Disconnectors according to EN 60947-3 respectively VDE 0660 part 107
- Utilisation Category: DC21B for Photovoltaic application
- Ambient Temperature: 50°C during 24 hours with peaks up to 55°C
- Terminals: Finger-proof according to VDE 0660-514 and BGV A3, IP 20
- 4 Pole, 2x3 contacts per string

**Mounting**

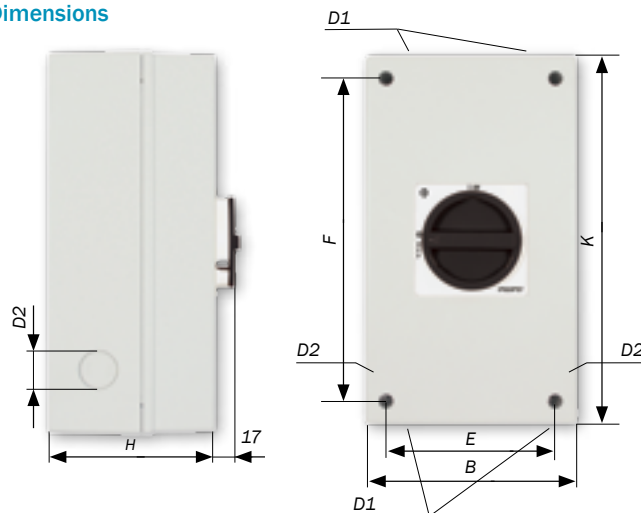
- Insulated enclosure, protection IP66/67, Class II Insulation, knock-out entries, black handle and contrasting grey escutcheon plate, OFF-position lockable with padlocks, switch interlocked with lid to prevent opening in 'ON' position, optional Red/Yellow handle available for use as Main/Emergency-Off DC Switch-Disconnecter.

**Rated Value & Order Number**

Operational voltage	Operational current	Order number
330V	25A	<b>KG20B T106/GB-P103 KL11V</b>
330V	40A	<b>KG41B T106/GB-P103 KL11V</b>
420V	21A	<b>KG20B T106/GB-P103 KL11V</b>
420V	27A	<b>KG32B T106/GB-P103 KL11V</b>
420V	28A	<b>KG41B T106/GB-P103 KL11V</b>
510V	20A	<b>KG20B T106/GB-P103 KL11V</b>
510V	25A	<b>KG32B T106/GB-P103 KL11V</b>
600V	18A	<b>KG20B T106/GB-P103 KL11V</b>
600V	23A	<b>KG32B T106/GB-P103 KL11V</b>
690V	11A	<b>KG20B T106/GB-P103 KL11V</b>
690V	15A	<b>KG32B T106/GB-P103 KL11V</b>
750V	12A	<b>KG32B T106/GB-P103 KL11V</b>

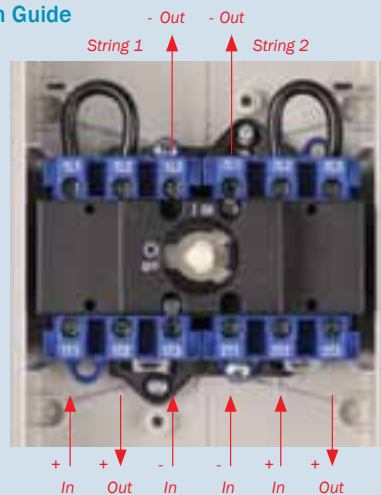
Data valid only if the pre-assembled jumpers have not been modified.

**Dimensions**



	<b>KG20B/KG32B</b>	<b>KG41B</b>
B	100	145
E	-	124
D1	4 x Ø 25	4 x Ø 25
D2	2 x Ø 25	2 x Ø 25
F	178	229
H	93	107
K	190	250

**Connection Guide**



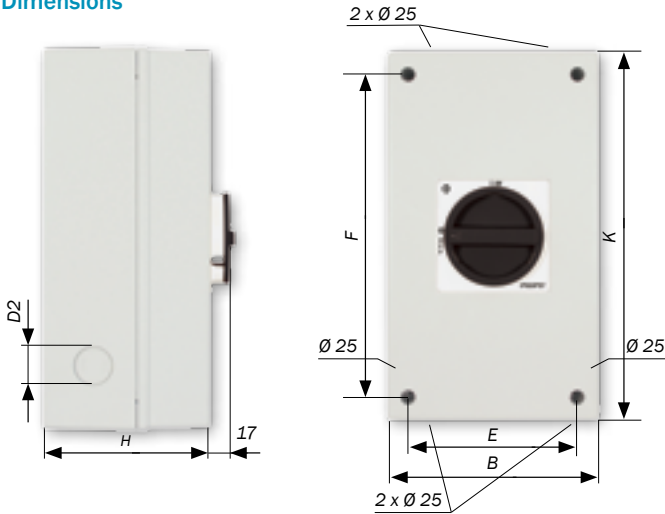
Connecting diagram	Tightening torque for terminal screws	Strip length
	KG20B/ KG32B 1,25Nm KG41B 1,80Nm	

**Maximum permissible wire gauge (use copper wire only)**

Single core wire	KG20B/KG32B:6mm <sup>2</sup>	KG41B:16mm <sup>2</sup>
or stranded wire		
Flexible wire	KG20B/KG32B:4mm <sup>2</sup>	KG41B:10mm <sup>2</sup>

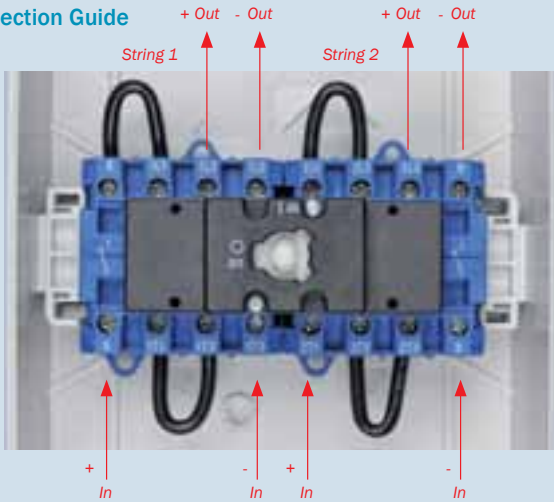


**Dimensions**



KG20B/KG32B/KG41B	
B	145
E	124
F	229
H	107
K	250

**Connection Guide**



Connecting diagram	Tightening torque for terminal screws	Strip length
	KG20B/ 1,25Nm KG32B	KG20B/ 9 KG32B
	KG41B 1,80Nm	KG41B 10

**Maximum permissible wire gauge (use copper wire only)**  
 Single core wire or stranded wire: KG20B/KG32B:6mm<sup>2</sup> KG41B:16mm<sup>2</sup>  
 Flexible wire: KG20B/KG32B:4mm<sup>2</sup> KG41B:10mm<sup>2</sup>



DC Switch-Disconnectors for solar photovoltaic (PV) power supply system acc. to IEC 60364-7-712:2002.

**General Data**

- Switch-Disconnectors according to EN 60947-3 respectively VDE 0660 part 107
- Utilisation Category: DC-21B for Photovoltaic application
- Ambient Temperature: 50°C during 24 hours with peaks up to 55°C
- Terminals: Finger-proof according to VDE 0660-514 and BGV A3, IP 20
- 4 Pole, 2x4 contacts per string

**Mounting**

- Insulated enclosure, protection IP66/67, Class II Insulation, knock-out entries, black handle and contrasting grey escutcheon plate, OFF-position lockable with padlocks, switch interlocked with lid to prevent opening in 'ON' position, optional Red/Yellow handle available for use as Main/Emergency-Off DC Switch-Disconnector.

**Rated Value & Order Number**

Operational voltage	Operational current	Order number
440V	25A	<b>KG20B T108/GB-P103 KL11V</b>
440V	40A	<b>KG41B T108/GB-P103 KL11V</b>
560V	21A	<b>KG20B T108/GB-P103 KL11V</b>
560V	26A	<b>KG32B T108/GB-P103 KL11V</b>
560V	28A	<b>KG41B T108/GB-P103 KL11V</b>
680V	20A	<b>KG20B T108/GB-P103 KL11V</b>
680V	25A	<b>KG32B T108/GB-P103 KL11V</b>
800V	18A	<b>KG20B T108/GB-P103 KL11V</b>
800V	23A	<b>KG32B T108/GB-P103 KL11V</b>
920V	11A	<b>KG20B T108/GB-P103 KL11V</b>
920V	15A	<b>KG32B T108/GB-P103 KL11V</b>
1000V	12A	<b>KG32B T108/GB-P103 KL11V</b>

Data valid only if the pre-assembled jumpers have not been modified.



Main/Emergency - Off AC Switch-Disconnectors for solar photovoltaic (PV) power supply system acc. to IEC 60947.

**General Data**

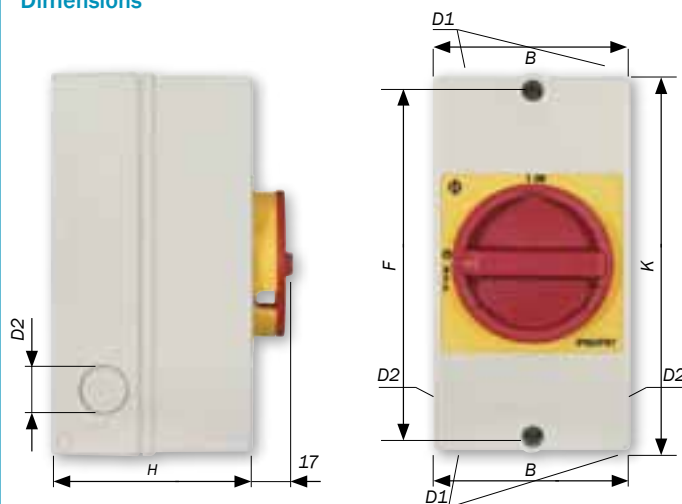
- Switch-Disconnectors according to EN 60947-3 respectively VDE 0660 part 107
- Ambient Temperature: 35°C average during 24 hours with peaks up to 40°C
- Terminals: Finger-proof according to VDE 0660-514 and BGV A3, IP 20

**Rated Value & Order Number**

Operational current AC-21A	Insulation voltage Ui	Enclosed thermal rating I	Order number
25A	690V	25A	<b>KG20 T203/GBA270 *KS1V</b>
25A	690V	25A	<b>KG20 T203/GBA294 *KL†</b>
32A	690V	32A	<b>KG32 T203/GBA294 *KL†</b>
40A	690V	40A	<b>KG41 T203/GBA270 *KL1V†</b>

† Larger enclosure to match KG20/32 T104 DC enclosure

**Dimensions**



	KG20...KS	KG20/KG32...KL	KG41
B	85	85	100
D1	4 x Ø 20/25	4 x Ø 20	4 x Ø 25
D2	2 x Ø 20	2 x Ø 20	2 x Ø 25
F	110	150	178
H	90	82	93
K	120	160	190

**Mounting**

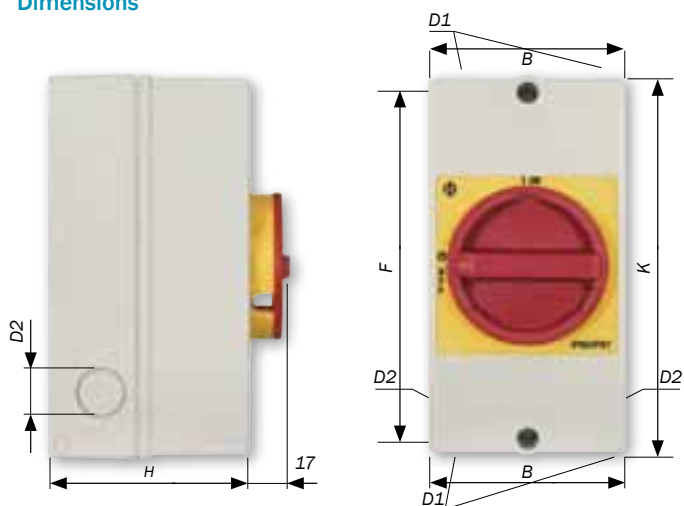
- Insulated enclosure, protection IP66/67, insulated, knock-out entries, red handle and contrasting yellow escutcheon plate, OFF-position lockable with padlocks, switch interlocked with lid to prevent opening in 'ON' position. Earth terminal included as standard. Optional Black/Grey handle available for use as Main Switch.

Connecting diagram	Tightening torque for terminal screws	Strip length
	KG20/ KG32      1,25Nm  KG41      1,80Nm	KG20/ <sup>9</sup> KG32  KG41 <sup>10</sup>

**Maximum permissible wire gauge (use copper wire only)**

Single core or stranded wire      KG20/KG32:6mm<sup>2</sup>    KG41:16mm<sup>2</sup>  
 Flexible wire                              KG20/KG32:4mm<sup>2</sup>    KG41:10mm<sup>2</sup>

**Dimensions**



	KG20...KS	KG20/KG32...KL	KG41
B	85	85	100
D1	4 x Ø 20/25	4 x Ø 20	4 x Ø 25
D2	2 x Ø 20	2 x Ø 20	2 x Ø 25
F	110	150	178
H	90	82	93
K	120	160	190

**Mounting**

- Insulated enclosure, protection IP66/67, insulated, knock-out entries, red handle and contrasting yellow escutcheon plate, OFF-position lockable with padlocks, switch interlocked with lid to prevent opening in 'ON' position. Earth terminal included as standard. Optional Black/Grey handle available for use as Main Switch.

Main/Emergency - Off AC Switch-Disconnectors for solar photovoltaic (PV) power supply system acc. to IEC 60947.

**General Data**

- Switch-Disconnectors according to EN 60947-3 respectively VDE 0660 part 107
- Ambient Temperature: 35°C average during 24 hours with peaks up to 40°C
- Terminals: Finger-proof according to VDE 0660-514 and BGV A3, IP 20
- 4 Pole (3 phase and switched neutral)

**Rated Value & Order Number**

Operational current AC-21A, I <sub>e</sub>	Insulation voltage U <sub>i</sub>	Enclosed thermal rating I	Order number
25A	690V	25A	<b>KG20 T204/GBA290 *KS1V</b>
25A	690V	25A	<b>KG20 T204/GBA486 KL51V †</b>
32A	690V	32A	<b>KG32 T204/GBA486 KL51V †</b>
40A	690V	40A	<b>KG41 T204/GBA290 *KL1V</b>

† Larger enclosure to match KG20/32 T104 DC enclosure

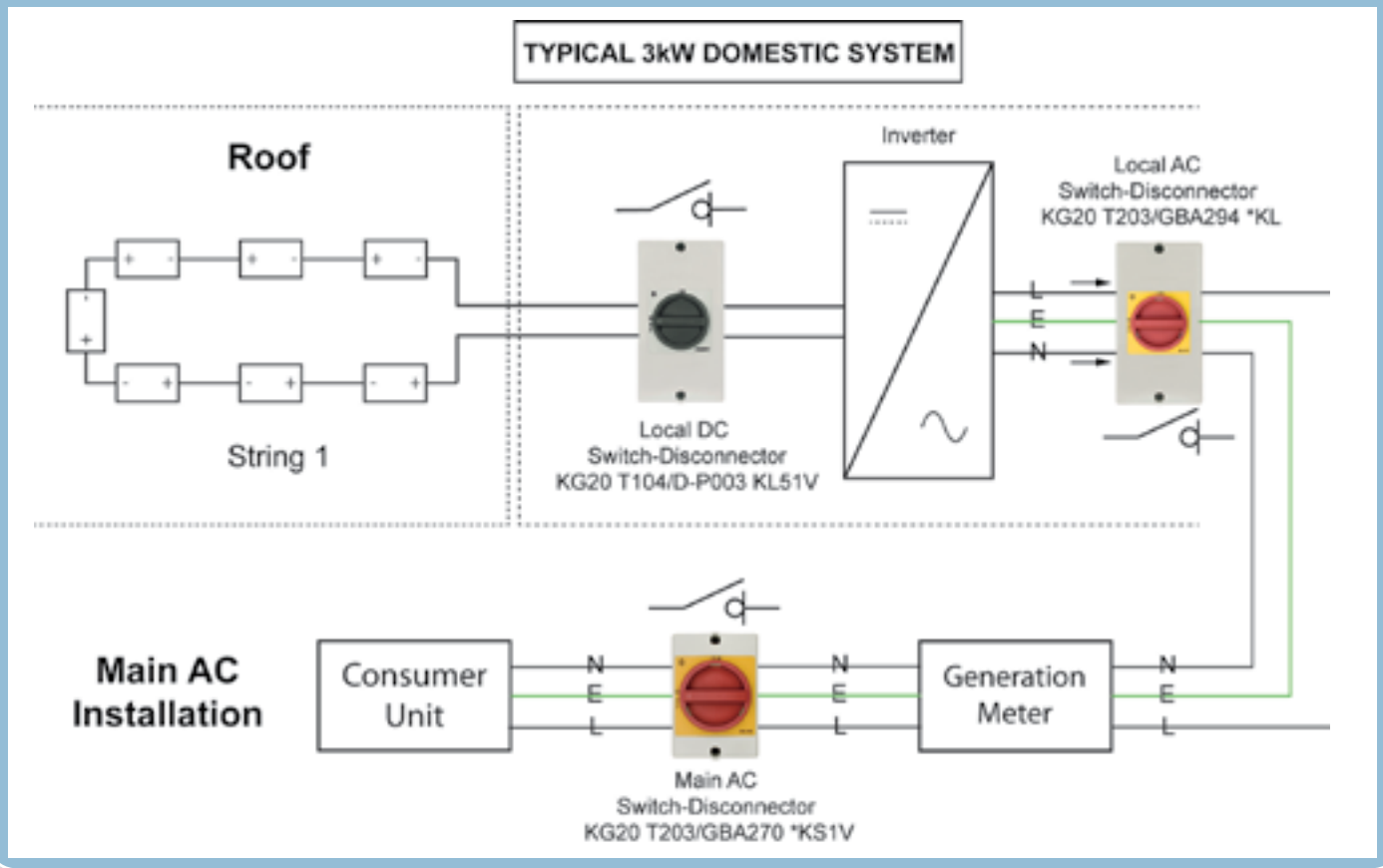


Connecting diagram	Tightening torque for terminal screws	Strip length
	KG20/ KG32      1,25Nm	KG20/ <sup>9</sup> KG32
	KG41      1,80Nm	KG41 <sup>10</sup>

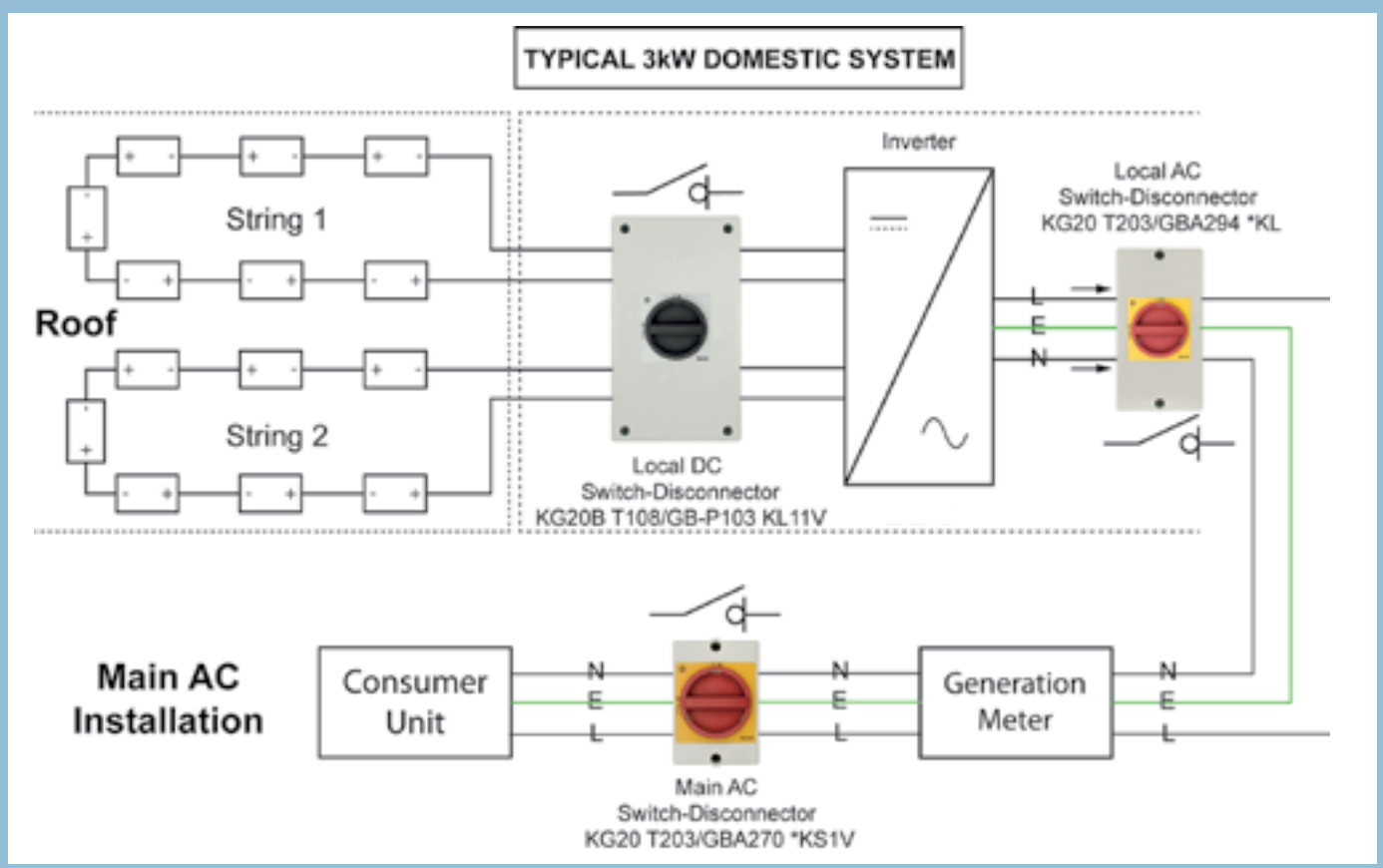
**Maximum permissible wire gauge (use copper wire only)**

Single core or stranded wire	KG20/KG32:6mm <sup>2</sup>	KG41:16mm <sup>2</sup>
Flexible wire	KG20/KG32:4mm <sup>2</sup>	KG41:10mm <sup>2</sup>

Single String



Two String



## PV Disconnect Switches – Enclosed • DC-21B Rating Information @ 50 °C &amp; 60 °C.

Ambient Temp	Max Thermal Rating	Rated Operating Voltage & Current								Order code
		440V	450V	500V	560V	680V	800V	920V	1000V	
50 °C	25A	25A	25A	21A	21A	20A	18A	11A	-	KG20 T104/D-P003 KL51V
60 °C	23A	23A	23A	21A	21A	20A	18A	11A	-	
50 °C	28A	28A	28A	28A	28A	25A	23A	15A	12A	KG32 T104/D-P003 KL51V
60 °C	23A	23A	23A	23A	23A	23A	23A	15A	12A	
50 °C	40A	40A	40A	28A	28A	25A	23A	10A	-	KG41 T104/D-P003 KL11V
60 °C	40A	40A	40A	28A	28A	25A	23A	10A	-	

Ambient Temp	Max Thermal Rating	Rated Operating Voltage & Current							Order code
		480V	500V	650V	660V	800V	840V	1000V	
50 °C	25A	25A	25A	25A	25A	21A	21A	20A	KG20B T106/D-P003 KL11V
60 °C	22A	22A	22A	22A	22A	21A	21A	20A	
50 °C	27A	27A	27A	27A	27A	27A	27A	25A	KG32B T106/D-P003 KL11V
60 °C	22A	22A	22A	22A	22A	22A	22A	22A	
50 °C	40A	40A	40A	40A	40A	28A	28A	25A	KG41B T106/D-P003 KL11V
60 °C	40A	40A	40A	40A	40A	28A	28A	25A	
50 °C	60A	60A	60A	60A	60A	-	-	-	KG80C T106/D-P003 STM
60 °C	60A	60A	60A	60A	60A	-	-	-	

Ambient Temp	Max Thermal Rating	Rated Operating Voltage & Current				Order code
		640V	880V	920V	1000V	
50 °C	25A	25A	25A	25A	21A	KG20B T108/D-P003 KL11V
60 °C	20A	20A	20A	20A	20A	
50 °C	26A	26A	26A	26A	26A	KG32B T108/D-P003 KL11V
60 °C	20A	20A	20A	20A	20A	
50 °C	40A	40A	40A	40A	35A	KG41B T108/D-P003 KL11V
60 °C	35A	35A	35A	35A	35A	
50 °C	60A	60A	60A	-	-	KG80C T108/D-P003 STM
60 °C	55A	55A	55A	-	-	

Rated insulation voltage: 1000V (all types)

The ratings given in the above tables are in accordance with the requirements of IEC/EN 60947-3, utilisation category DC-21B

Ratings in accordance with utilisation category DC-21B are suitable for use in the selection of an isolator switch that is required to isolate a P.V. string input to a P.V. inverter.

## PV Disconnect Switches for 2 Strings – Enclosed • DC-21B. Rating Information @ 50 °C &amp; 60 °C

Ambient Temp	Max Thermal Rating	Rated Operating Voltage & Current						Order code
		220V	280V	340V	400V	460V	500V	
50 °C	25A	25A	21A	20A	18A	11A	-	KG20 T104/GB-P103 KL51V
60 °C	23A	23A	21A	20A	18A	11A	-	
50 °C	28A	28A	28A	25A	23A	15A	12A	KG32 T104/GB-P103 KL51V
60 °C	23A	23A	23A	23A	23A	15A	12A	
50 °C	40A	40A	28A	25A	23A	10A	-	KG41 T104/GB-P103 KL11V
60 °C	40A	40A	28A	25A	23A	10A	-	

Ambient Temp	Max Thermal Rating	Rated Operating Voltage & Current						Order code
		330V	420V	510V	600V	690V	750V	
50 °C	25A	25A	21A	20A	18A	11A	-	KG20B T106/GB-P103 KL11V
60 °C	23A	22A	21A	20A	18A	11A	-	
50 °C	27A	27A	27A	25A	23A	15A	12A	KG32B T106/GB-P103 KL11V
60 °C	22A	22A	22A	22A	22A	15A	12A	
50 °C	40A	40A	28A	25A	23A	10A	-	KG41B T106/GB-P103 KL11V
60 °C	40A	40A	28A	25A	23A	10A	-	

Ambient Temp	Max Thermal Rating	Rated Operating Voltage & Current						Order code
		440V	560V	680V	800V	920V	1000V	
50 °C	25A	25A	21A	20A	18A	11A	-	KG20B T108/GB-P103 KL11V
60 °C	20A	20A	20A	20A	18A	11A	-	
50 °C	26A	26A	26A	25A	23A	15A	12A	KG32B T108/GB-P103 KL11V
60 °C	20A	20A	20A	20A	20A	15A	12A	
50 °C	40A	40A	28A	25A	23A	10A	-	KG41B T108/GB-P103 KL11V
60 °C	35A	35A	28A	25A	23A	10A	-	

Rated insulation voltage: 1000V (all types)

The ratings given in the above tables are in accordance with the requirements of IEC/EN 60947-3, utilisation category DC-21B  
Ratings in accordance with utilisation category DC-21B are suitable for use in the selection of an isolator switch that is required to isolate a P.V. string input to a P.V. inverter.



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