KENDRION INTORQ

Bridge-Half-Wave Rectifier
BEG-561-□□□-□□□ (-□)

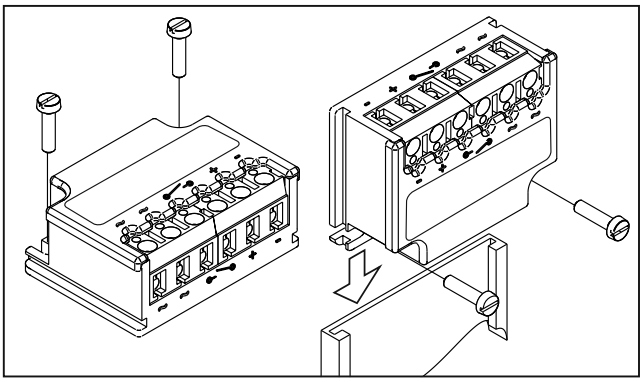
Please read this documentation before you start working!

The bridge-half-wave rectifiers conduce to supply electromagnetic spring-applied DC-brakes which are released for operation with such rectifers. Different application is only permitted with technical approval of INTORQ.
The bridge-half-wave rectifiers switch over from bridge rectification to half-wave rectification after a fixed overexcitation time. Depending on the load dimensioning, switching performance may be improved or power may be reduced.
Terminals 3 and 4 are located in the DC-circuit. The inductive voltage peak by DC-switching (see connection diagram "Shortened braking times") is limited by an integrated spark-suppressor on terminals 5 and 6.

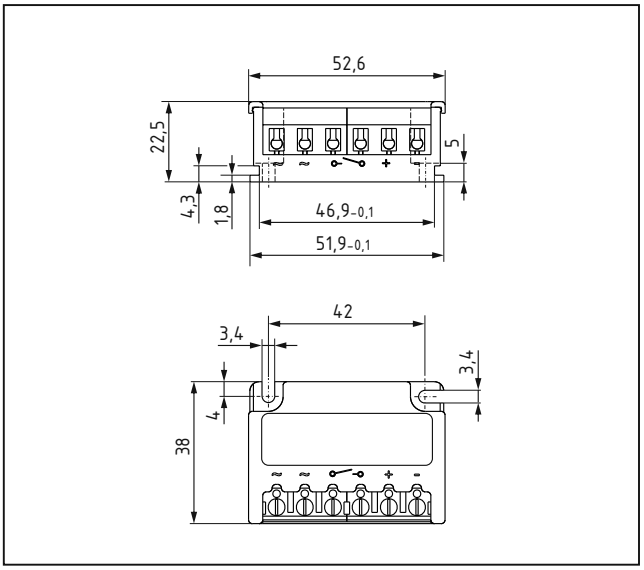
Stop!
Keep these instructions with the rectifier at all times!
Install rectifier in the switch cabinet if the ambient temperature is too high!
For equipment in residential, business or industrial areas (all usage areas that are directly connected to the public low voltage network) in order to adhere to the permitted interference voltage on mains power supply cables, an additional 100nF X-capacitor is required at the power supply terminals of models BEG-561-440-□□□ (-□)!

Danger
Always disconnect the equipment from the power supply when working on the rectifier!

Attachment options



Dimensions



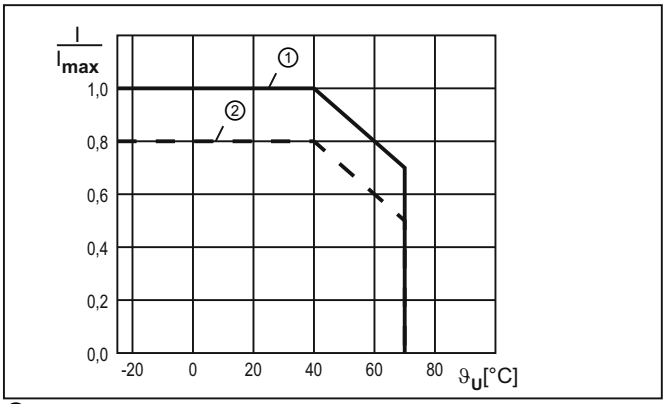
Technical data

Rectifier type	Bridge-half-wave rectifier
Output voltage - bridge rectification	$0,9xU_1$
Output voltage - half-wave rectification	$0,45xU_1$
Ambient temperature (storage / operation) [°C]	-40...+70 (mounting: -20...+70)
Wire cross section	0,5 ... 2,5mm² / AWG20 ... AWG16 (rigid/flexible)
Tightening torque	0,6Nm (5,3lbf in)
Stripping length	7mm

U_1 Input voltage (40...60Hz)

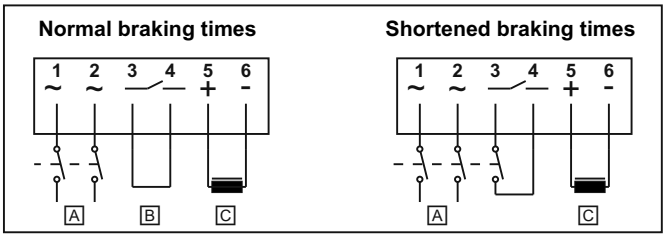
Type	Input voltage U_1 (40Hz...60Hz) min. [V~]	nom. [V~]	max. [V~]	Max. current load I_{max} bridge [A]	half-wafe [A]	Overexcitation time $t_ü$ (±20%) at U_{1min} [s]	at U_{1Nenn} [s]	at U_{1max} [s]
BEG-561-255-030	160	230	255	3,0	1,5	0,430	0,300	0,270
BEG-561-255-130				3,0	1,5	1,870	1,300	1,170
BEG-561-440-006-1	230	400	440	1,5	0,75	0,110	0,060	0,060
BEG-561-440-030-1				1,5	0,75	0,500	0,300	0,270
BEG-561-440-130				3,0	1,5	2,300	1,300	1,200

Permissible current load at ambient temperature



① If screwed to metal surface (good heat dissipation)
② Other type of installation (e.g. adhesive)

Connection



Shortened braking times

Stop!
With switching at the DC side (shorter braking times), switching must also take place at the AC side! Otherwise no overexcitation will occur when the equipment is switched on again.

Coil voltage selection

Rated coil voltage	Function
$U_{Sp} = 0,45xU_1$	Full overexcitation No holding current reduction
$0,45xU_1 < U_{Sp} < 0,90xU_1$	Partial overexcitation Partial holding current reduction
$U_{Sp} = 0,90xU_1$	No overexcitation Full holding current reduction

U_{Sp} Rated coil voltage U_1 Input voltage (40 to 60 Hz)

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Modifications:
V02 603851 11.05.2021 Fuhrmann

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