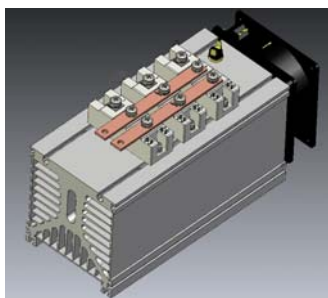


# SKS 290F B6U 190 V16



**SEMISTACK Thyristor**

## Three-phase uncontrolled bridge rectifier

SKS 290F B6U 190 V16  
Preliminary Data

### Features

- P3/265F heatsink
- Forced air cooled

### Typical Applications

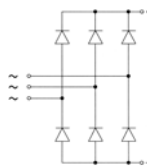
- Industrial rectifiers

### Options

- Fuse
- RC
- 24V<sup>dc</sup>, 48V<sup>dc</sup>, 115V<sup>ac</sup> fan versions

No. 08767305

Characteristics						
Symbol	Conditions	min.	typ.	max.	Unit	
<b>Electrical Data</b>						
I <sub>d</sub>	T <sub>amb</sub> = 35°C	no overload		290	A	
		150 % overload, 60s every 10 min.		225	337	A
		200 % overload, 60s every 10 min.		201	402	A
V <sub>CES</sub>				1600	V	
V <sub>DC</sub>	DC voltage applied to the capacitor bank			670	V	
V <sub>AC</sub>	network voltage (line side), -20% / +15%			500	V	
V <sub>isol</sub>	50 Hz / 1 min.		2500		V	
i <sup>2</sup> t	T <sub>vj</sub> = 25°C			125	kA <sup>2</sup> s	
	T <sub>vj</sub> = 125°C			180	kA <sup>2</sup> s	
(di/dt) <sub>cr</sub>					A/μs	
(dv/dt) <sub>cr</sub>					V/μs	
V <sub>GT</sub>					V	
I <sub>GT</sub>					mA	
P <sub>tot</sub>	T <sub>amb</sub> = 35°C		687		W	
R <sub>thja</sub>	per component		0.87		K/W	
T <sub>vj</sub>		-40		135	°C	
Fuse	No fuse				A	
RC	No RC				Ω	
RC	No RC				μF	
Thermal trip	normally closed		85		°C	
<b>Mechanical Data</b>						
dv/dt <sub>AIR</sub>					m <sup>3</sup> /h	
w	approx. total weight		6		kg	
Size	Width x Depth x Height (with fan)	125	313	176	mm	
T <sub>stg</sub>		5		60	°C	
T <sub>amb</sub>		5		60	°C	
Altitude	Installation height w/o derating			1000	m	
Protection			IP00			
Pollution	EN 50178		2			
<b>Fan Data</b>						
Fan	included in the stack ( <b>YES</b> )					
Type	SKF 3-230-01					
V <sub>Fan</sub>	Fan voltage		230		V	
f <sub>FAN</sub>	Fan frequency		50		Hz	
I <sub>FAN</sub>	Fan current		0.12		A	
P <sub>FAN</sub>	Fan power		25		W	



**B6U**

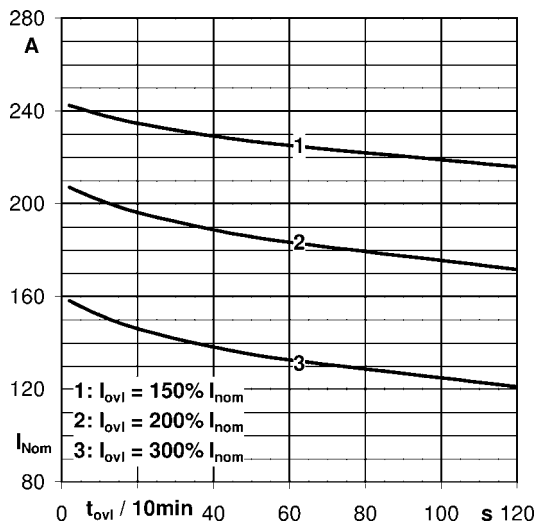


Fig. 1 Maximal overload factor vs nom current and ovl duration,  $T_{amb} = 35^\circ C$

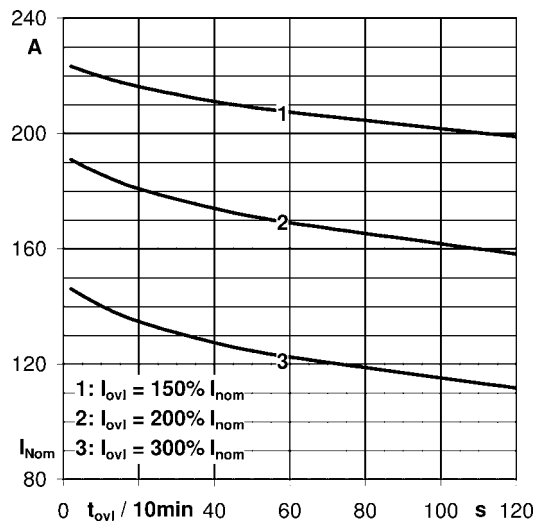


Fig. 2 Maximal overload factor vs nom current and ovl duration,  $T_{amb} = 45^\circ C$

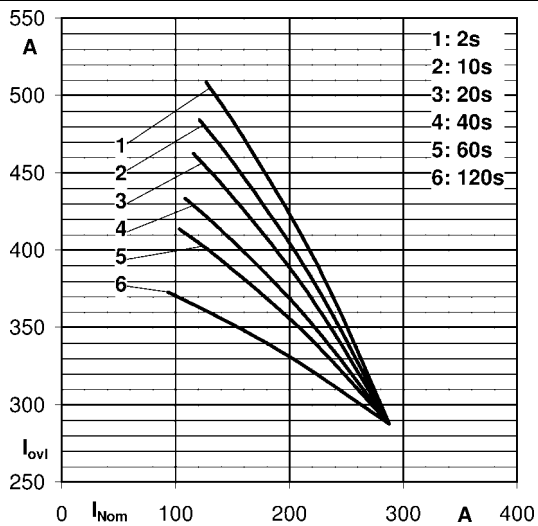


Fig. 3 Maximal overload duration vs nom current and ovl factor,  $T_{amb} = 35^\circ C$

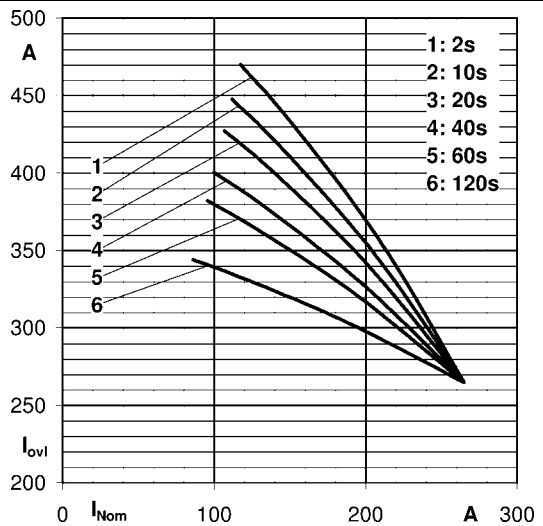


Fig. 4 Maximal overload duration vs nom current and ovl factor,  $T_{amb} = 45^\circ C$

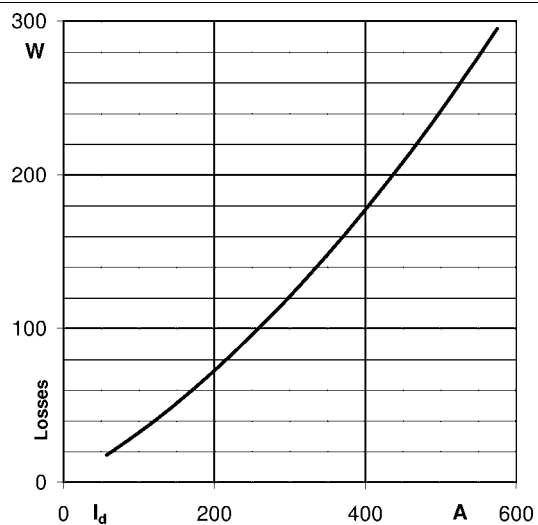


Fig. 5 Power losses

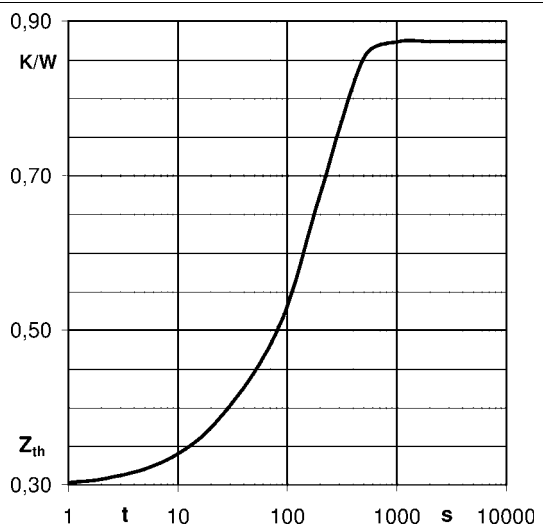
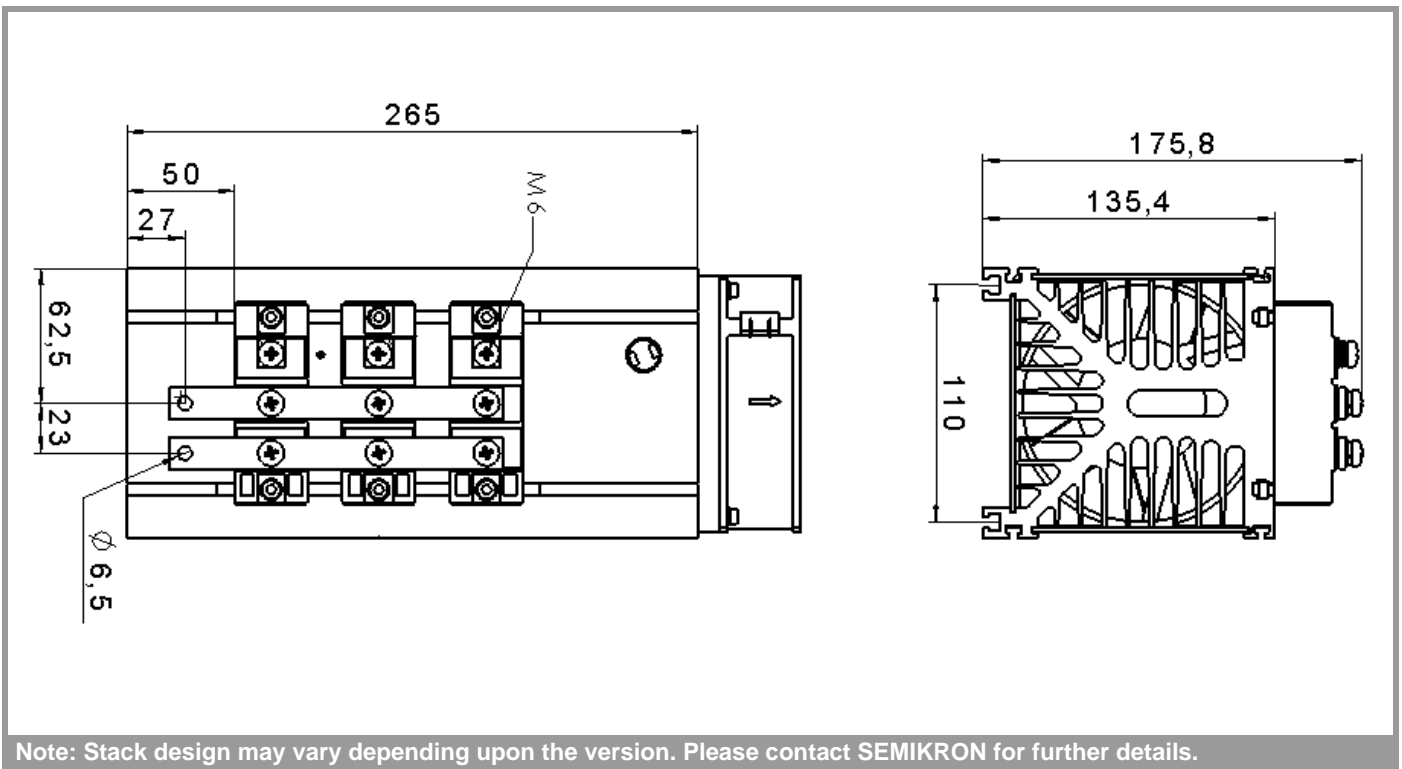


Fig. 6 Thermal impedance  $Z_{th}(j-a)$

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Note: Stack design may vary depending upon the version. Please contact SEMIKRON for further details.

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