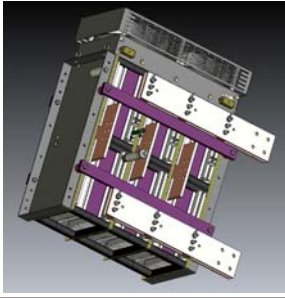


SKS 4015F B6U 4060 V24



SEMISTACK Diode

Three-phase uncontrolled bridge rectifier

SKS 4015F B6U 4060 V24

Preliminary Data

Features

N4/250F heatsink

Typical Applications

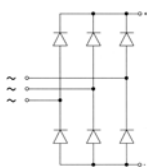
- Industrial rectifiers

Options

- Fuse
- RC
- Reverse blocking voltage test
- Functional test
- Dielectric / isolation test

No. 08757274

Characteristics					
Symbol	Conditions	min.	typ.	max.	Unit
Electrical Data					
I_d	$T_{amb} = 35^\circ\text{C}$	no overload		4015	A
		150 % overload, 60s every 10 min.	2927	4319	A
		200 % overload, 60s every 10 min.	2496	4993	A
V_{CES}				2400	V
V_{DC}	DC voltage applied to the capacitor bank			1050	V
V_{AC}	network voltage (line side), -20% / +15%			760	V
V_{isol}	50 Hz / 1 min.		2500		V
i^2t	$T_{vj} = 25^\circ\text{C}$			-	kA^2s
	$T_{vj} = 175^\circ\text{C}$			3920	kA^2s
$(di/dt)_{cr}$					$\text{A}/\mu\text{s}$
$(dv/dt)_{cr}$					$\text{V}/\mu\text{s}$
V_{GT}					V
I_{GT}					mA
P_{tot}	$T_{amb} = 35^\circ\text{C}$		11702		W
R_{thja}	per component		0.072		K/W
T_{vj}		-40		+175	$^\circ\text{C}$
Fuse	No fuse				A
RC	No RC				Ω
RC	No RC				μF
Thermal trip	normally closed		112		$^\circ\text{C}$
Mechanical Data					
dv/dt_{AIR}					m^3/h
w	approx. total weight		130		kg
Size	Width x Depth x Height (with fan)	706	472	781	mm
T_{stg}		5		60	$^\circ\text{C}$
T_{amb}		5		60	$^\circ\text{C}$
Altitude	Installation height w/o derating			1000	m
Protection			IP00		
Pollution	EN 50178		2		
Fan Data					
Fan	included in the stack (YES)				
Type	2x SKF N4-230-01				
V_{Fan}	Fan voltage		230		V
f_{FAN}	Fan frequency		50		Hz
I_{FAN}	Fan current		2.1		A
P_{FAN}	Fan power		430		W



B6U

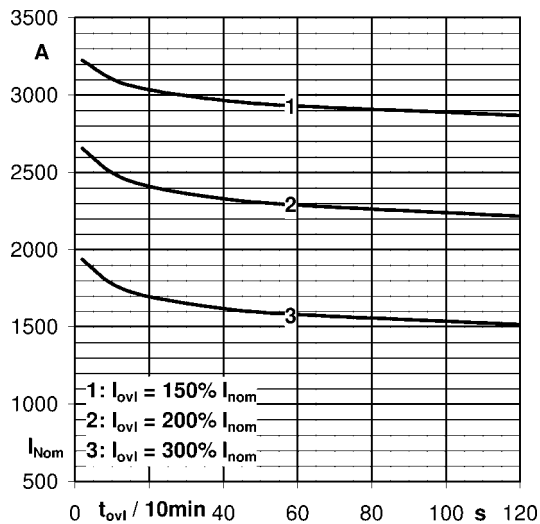


Fig. 1 Maximal overload factor vs nom current and ovl duration, $T_{amb} = 35^\circ\text{C}$

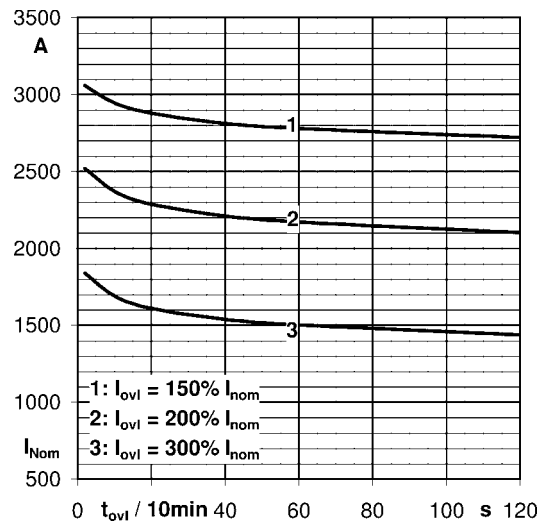


Fig. 2 Maximal overload factor vs nom current and ovl duration, $T_{amb} = 45^\circ\text{C}$

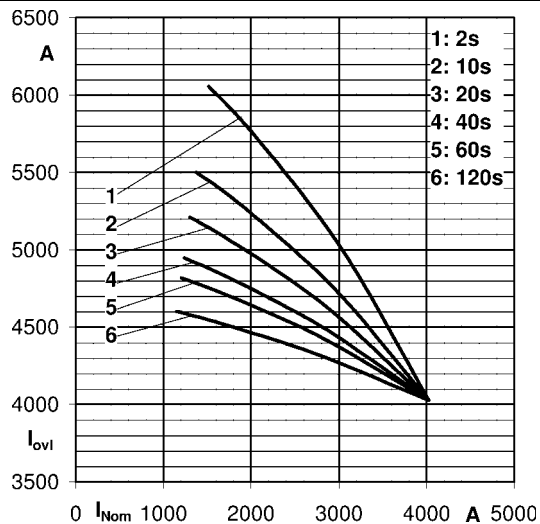


Fig. 3 Maximal overload duration vs nom current and ovl factor, $T_{amb} = 35^\circ\text{C}$

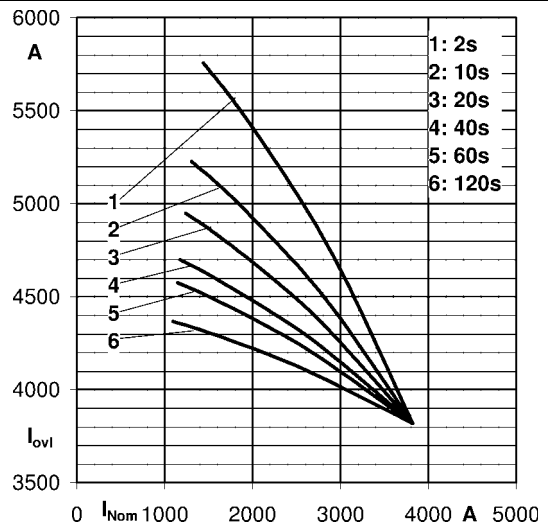


Fig. 4 Maximal overload duration vs nom current and ovl factor, $T_{amb} = 45^\circ\text{C}$

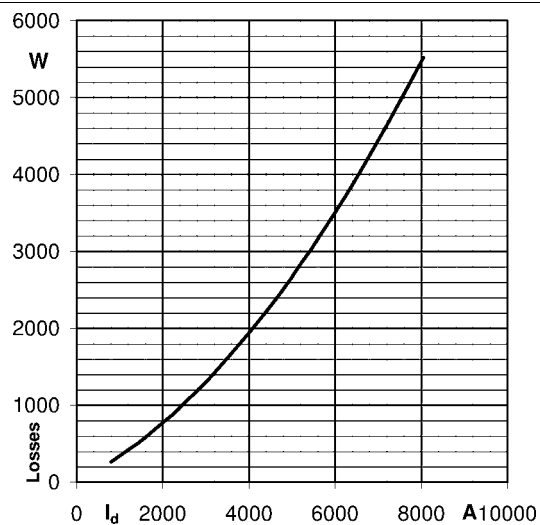


Fig. 5 Power losses

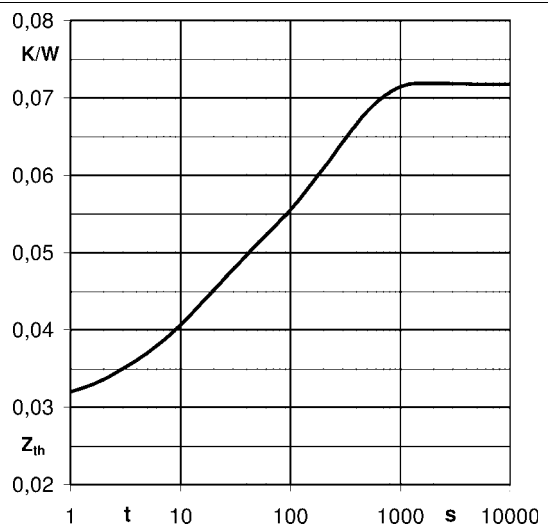
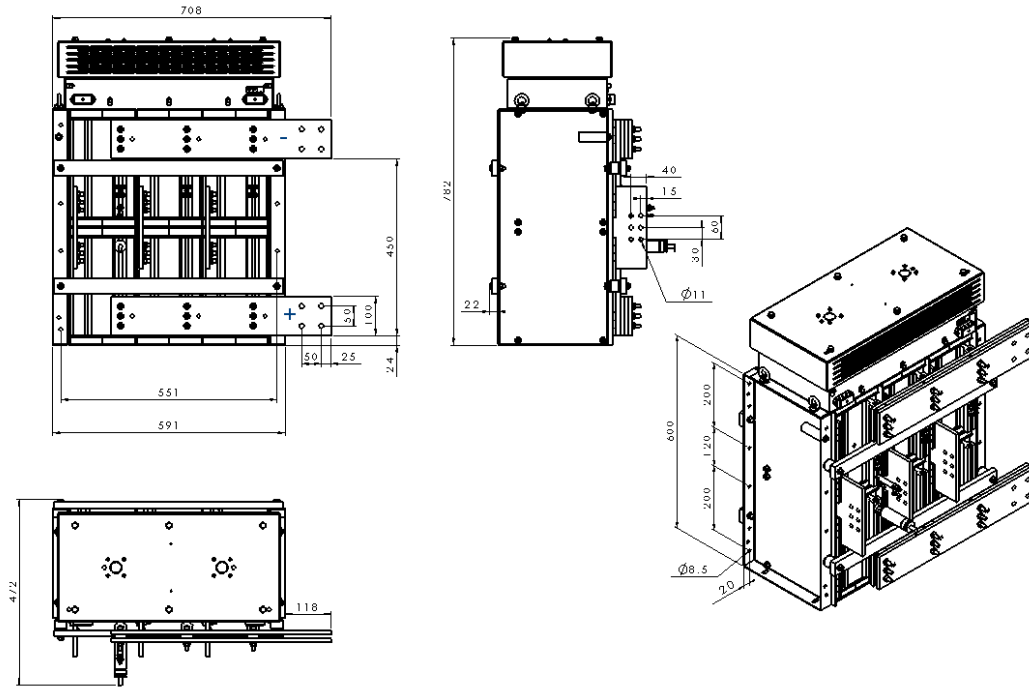


Fig. 6 Thermal impedance $Z_{th}(j-a)$

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

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