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05/2021

› GN4 Series

4 Channel Solid State Relays

Panel Mount – 4 Channel

- 25 A in a classic Hockey Puck package
- 4 channels in one package
- Fast-on terminals
- Special Zero Cross (Resistive, Inductive and Capacitive loads)
- cRUus, CE and UKCA Recognized



84154010N

Product Selection - Special Zero Cross (Resistive, Inductive and Capacitive loads)	
Rated Load Current	25 A
Output Voltage	12-280 V~
Control Voltage	
4-32 V⎓	**84154010N**

Part number system
GN4

Phases/Channels
8415: 4-Channel

Switching Type
0: Zero Cross

Control Voltage
0: 4-32 V⎓

8415 **4** **0** **1** **0** **N**

Cover
4: No cover

Output Current
1: 25 A

Generation
N: New Generation

Do you need an adapted or customized solution? Contact us on **www.crouzet.com**

Description:

Crouzet Solid State Relays are designed to be used in almost any application, offering very long life expectancy and are easy to install, easy to use, robust and multipurpose.

For more information about Crouzet's Solid State relays, please visit **www.crouzet.com**.

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Accessories		
Type	**Description**	**Part-Number**
Heatsink	0.9 °C/W Thermal Resistance	**26532752N**
Heatsink	1.1 °C/W Thermal Resistance	**26532753N**
Heatsink	1.2 °C/W Thermal Resistance	**26532754N**
Heatsink	1.75 °C/W Thermal Resistance	**26532755N**
Heatsink	2.2 °C/W Thermal Resistance	**26532756N**
Adapter	DIN Rail	**26532764N**
Thermal Pad	Pre-cut Thermal Pad	**26532720N**
Thermal Pad	Self-Adhesive Thermal Pad	**26532722N**
Screws	Screw Mounting Kit	**26532001**
Thermal Grease	Thermal Grease for Heatsink mounting	**26532003**

Output Characteristics (1)	
Description	25 A
Operating Voltage (40-440 Hz) [Vrms]	24-280
Maximum Load Current [mArms] (2)(3)	4 x 25
Minimum Load Current [mArms]	5
Transient Overvoltage [Vpk]	600
Maximum Surge Current (50/60 Hz, 1 Cycle) [Apk]	250 (min) 260 (typ)
Maximum I^2t for Fusing (50/60 Hz 1/2 cycle) [A^2 sec]	340 (min) 600 (typ)
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/µsec]	500
Maximum Off-State Leakage Current @ Rated Voltage [mArms]	1
Maximum On-State Voltage Drop @ Rated Current [Vrms]	1.25
Thermal Resistance Junction to Case (Rjc) [°C/W]	1.7
Minimum Heatsink for Rated Current @ 40 °C [°C/W] (2)	0.21
Minimum Power Factor (at Maximum load)	0.5

Input Characteristics (1)	
Description	4-32 V⎓
Control Voltage Range	4-32 V⎓
Minimum Turn-On Voltage	4 V⎓
Must Turn-Off Voltage	1 V⎓
Maximum Reverse Voltage	-32 V⎓
Minimum Input Current [mA]	5
Maximum Input Current [mA]	12
Nominal Input Impedance [Ohms]	Current Regulated
Maximum Turn-On Time	½ Cycle
Maximum Turn-Off Time	½ Cycle

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General Characteristics	
Description	25 A
Dielectric Strength (Input-Output) (Vrms)	4000
Dielectric Strength (Output-Case) (Vrms)	2500
Minimum Insulation Resistance (@ 500 V⎓)	$10^9\Omega$
Maximum Capacitance, Input/Output	10.8 pF
Ambient Operating Temperature Range	-40 to 80 °C
Ambient Storage Temperature Range	-40 to 100 °C
Housing Material	UL94 V-0
Terminals	Fast-on (0.25" / 6.3 mm)
Mounting Screw Torque (in-lb/Nm)	11-16 / 1.2-1.8
Humidity	85 % non-condensing
Input Status Indicator	LED Red
Weight (g)	90

General Notes

(1) All parameters at 25 °C unless otherwise

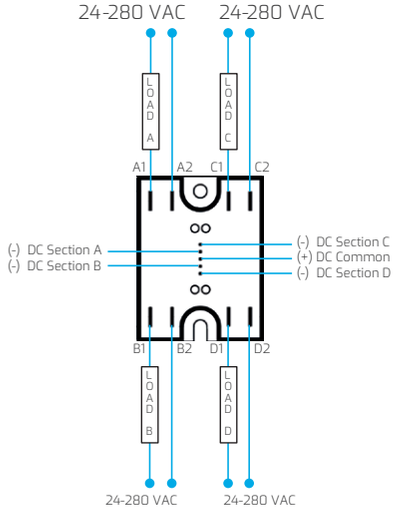
(2)Heatsink required, see derating curves

(3)Value @ 40 °C

Diagrams

Wiring

GN4 Series



It's recommended to use external overvoltage protection (Varistor / TVS Diode) and short-circuit protection (fuse / circuit breaker), if they are not already integrated

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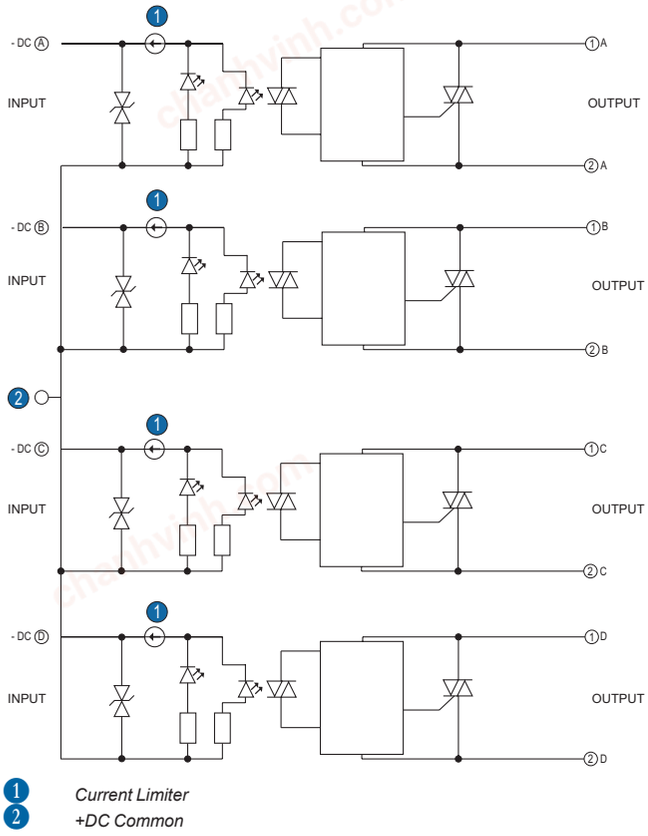
Diagrams

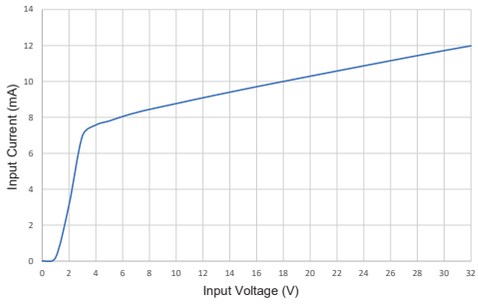
Equivalent Circuit Block

GN4 Series 4-32 V⎓ control Triac - 12-280 V∿ - Zero Cross - 84154010N



1 *Current Limiter*
2 *+DC Common*

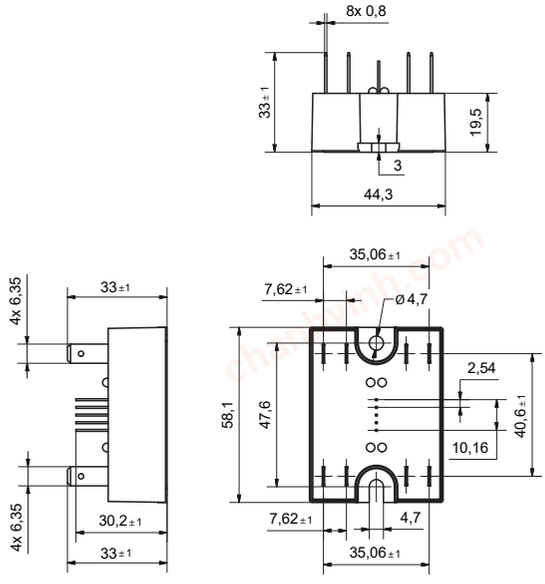
Input current vs Input Voltage
Standard Regulated DC inputs



Diagrams

Dimensions (mm)

GN4 Series



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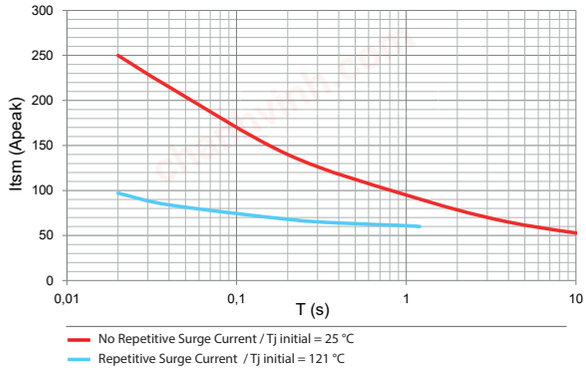
Curves

Surge Current Information

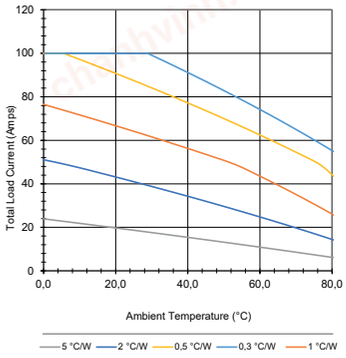
GN4 - 25 A



Curves

Thermal Derating Curves

GN4 - 25 A - 25 Amps per channel



Accessories

Heatsink

0.9 °C/W Thermal Resistance - **26532752N**



1.1 °C/W Thermal Resistance - **26532753N**



1.2 °C/W Thermal Resistance - **26532754N**



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1.75 °C/W Thermal Resistance - **26532755N**



2.2 °C/W Thermal Resistance - **26532756N**



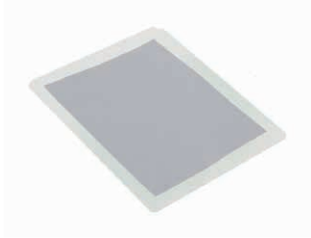
Accessories

Thermal Pad

Pre-cut - **26532720N**



Self-Adhesive - **26532722N**



Accessories

Others

Screw Mounting Kit - **26532001**



Thermal Grease for Heatsink mounting - **26532003**



DIN Rail - **26532764N**



Standards & Electromagnetic Compatibility Specfification
Designed in accordance with the requirements of IEC 62314
IEC 60068-2-27: Shock Resistance 15 g /11 ms
IEC 60068-2-6: Vibration 0.33 mm / Amplitude over 10-55 Hz
IEC 61000-4-2: Electrostatic Discharge Discharge 8kV air discharge Criterion A – Level 3
IEC 61000-4-4: Electrically Surge Output 1 kV Line to Line Criterion B – Level 3
IEC 61000-4-5: Surge Output 1 kV Line to Line Criterion B – Level 3

Standards

c UL us UL508 CE UKCA

Warning:

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