



**बैंक नोट पेपर मिल इण्डिया प्रा. लिमिटेड**

**BANK NOTE PAPER MILL INDIA PVT LIMITED**

JV of SPMCIL - A Govt. of India Enterprises & BRBNMPL - A Subsidiary of RBI

**Administrative Building, Gate 1, Paper Mill Compound**

**Note Mudran Nagar, Mysuru 570003**

**Phone: 0821-2401 111/175/180/177, FAX: 0821- 2401120**

**TENDER ENQUIRY FOR SUPPLY OF SOLID STATE RELAY AT BNPM PLANT, MYSURU**

This tender document contains 10 pages

<b>Tender Enquiry No.</b>	BNPM/OTE/199/2023-24
<b>Tender issuing date</b>	26/07/2023
<b>Pre-bid meeting date &amp; time</b>	NA
<b>Due date &amp; time for bid submission</b>	09/08/2023, 11:00
<b>Opening date and time for tenders</b>	09/08/2023, 11:30
<b>Mode of bid submission</b>	Online & Offline
<b>Type of tender</b>	Open Tender Enquiry
<b>Tender Processing Fee excluding of GST (in INR)</b>	Rs.100/- + Taxes
<b>Details of contact person</b>	Supply Chain & Purchase Department 0821-2401175/180

**Registered & Corporate Office:**

**Administrative Building**

**Gate 1, Paper Mill Compound**

**Note Mudran Nagar, Mysuru - 570 003**

**Telephone No. 0821 - 2401 111**

**e-mail: [scm.tender@bnpmindia.com](mailto:scm.tender@bnpmindia.com)**

**website: [www.bnpmindia.com](http://www.bnpmindia.com)**



**OPEN TENDER ENQUIRY No. BNPM/OTE/199/2023-24**

**OPEN TENDER ENQUIRY No. BNPM/OTE/199/2023-24**

1. E-tenders are invited from eligible and qualified tenderers for supply of following goods :

S No	Item Description	UOM	Qty.
1.	Three Phase Power Solid State Relay , 50A RMS <ul style="list-style-type: none"><li>Control Voltage : 4-32VDC with LED and current regulator</li><li>Output Voltage : 24-600VAC</li><li>Nominal Current : 50 Amps ( RMS) , Ie-AC-51 category</li><li>Peak Voltage : 1200V</li><li>Operating Frequency Range : 10-440 Hz</li><li>I2T : 2450 - 2800 A2s</li><li>Turn ON / OFF time : 10ms</li><li>Built in IP20 - protection with Heat Sink</li><li>TMS2 Back to back Thyristors technology</li><li>Regulations : IEC/EN60947-4-x Compliant</li><li>Approx. Dimensions : 76X100X56.5 mm ( WXHDXD)</li><li>Equivalent model (Part No - SVT965460E , Brand : Celduc , Datasheet enclosed )</li></ul>	Nos.	2

**I. For Online Submission mode**

Type of Tender (Two Bid / PQB / EOI / RC / Development / Indigenization / Disposal of Scrap / Security item etc.	<b>Single Bid System</b> (Part-I Techno-commercial bid & Financial /Price Bid)
<b>Tender Processing Fee</b>	<b>Rs.100/- + taxes (to be paid online)</b>
Bid submission mode	Online Through e-tendering portal <a href="http://www.tenderwizard.com/BNP">www.tenderwizard.com/BNP</a> .
Closing date and time for receipt of tenders	<b>09.08.2023 @ 11.00 Hours</b>

- Interested bidders may obtain further information about this requirement from the above office selling the documents. They may also visit our website [www.tenderwizard.com/BNP](http://www.tenderwizard.com/BNP) mentioned above for further details.
- Aspiring Bidders/Contractors who have not registered in e-tendering should register through the website E – Tendering ([www.tenderwizard.com/BNP](http://www.tenderwizard.com/BNP)) for participating in the Online Tenders. The registration charges will be Rs. 500/- plus applicable taxes (per year) which needs to be paid through electronic mode only.
- For details, registration and e-payment, please visit e-tendering website [www.tenderwizard.com/BNP](http://www.tenderwizard.com/BNP) or contact KEONICS help desk @ 080-40482000.



**OPEN TENDER ENQUIRY No. BNPM/OTE/199/2023-24**

4. Class III Digital Signature Certificate (DSC) is mandatory to participate in e-Tenders. Participating bidders/Contractors have to make sure that they have the valid DSC. If not, they can procure from any of the firm as approved by CCA.
5. The tenderer shall satisfy BNPMIPL that they are competent and authorized to submit tender and/or to enter into a legally binding contract with the BNPMIPL. To this effect, any person giving a tender shall render documentary evidence that his signature on the tender submitted by him is legally binding upon himself, his firm or company as the case may be
6. BNPM reserves the right to cancel the tender at any stage without assigning the reasons thereof.

**II. For Offline Submission Mode- Sealed Quotation**

Type of Tender (Two Bid / PQB / EOI / RC / Development / Indigenization / Disposal of Scrap / Security item etc.	<b>Single Bid System</b> (Part-I Techno-commercial bid & Financial / Price Bid)
Date of Issue of tender documents	<b>From 26.07.2023 to 09.08.2023 (during office hours)</b>
Price of tender document	<b>NIL</b>
Place of Issue of tender documents	Department - SCM, Bank Note Paper Mill India Private Limited, Administrative Building, Paper Mill Compound, Note Mudran Nagar, Mysuru 570 003, Karnataka, India
Bid submission mode	Offline (Sealed quotation)
Closing date and time for receipt of tenders	09.08.2023 @ 11.00 Hours
Place of receipt of tender	Bank Note Paper Mill India Private Limited, Administrative Building , Paper Mill Compound, Note Mudran Nagar, Mysuru 570 003, Karnataka, India
Time and Date of opening of tender	09.08.2023 @ 11.30 Hours
Place of opening of tenders	Bank Note Paper Mill India Private Limited, Administrative Building , Paper Mill Compound, Note Mudran Nagar, Mysuru 570 003, Karnataka, India



**OPEN TENDER ENQUIRY No. BNPM/OTE/199/2023-24**

**Terms & Conditions:**

**1. Documents to be submitted:**

- a) Signed copy of this document (All the pages).
- b) Filled price details as per the format provided below in this document.
- c) Technical details /datasheet for the enquired product (if applicable).
- d) Micro / Small Enterprise (Certificate issued by MSME)/UAM/NSIC certificate (If applicable).
- e) Manufacturing unit details (if any).

**2. Price:** Price should be inclusive of P&F, Freight, Transit Insurance and GST. Price shall remain fixed & no price variation shall be accepted till completion of contract.

**3. Terms of Payment:** 100% payment shall be made within 30 days after receipt and acceptance of goods at BNPM Plant, Mysuru and on production of all required documents by the supplier. NEFT/RTGS details shall be furnished along with the Original Invoice.

**4. Delivery Terms & Delivery Address:** Delivery shall be made on F.O.R Basis, Bank Note Paper Mill India Pvt. Ltd., Mysore.

Delivery Address: Engineering Stores, Bank Note Paper Mill India Pvt. Ltd., Note Mudran Nagar, Mysore - 570003. Stores contact details: 0821-2401476/486.

**5. Liquidated Damages (LD):** Liquidated damages shall be applicable at the rate of 0.5% per week or part thereof until actual delivery or performance, subject to a maximum deduction of 10% of the delayed good's /service's contract price.

**6. Delay in supplier's performance:** Time for and the date specified in the contract or as extended for the delivery of the stores shall be deemed to be the essence of the contract and the supplier shall deliver the goods and perform the services under the contract within the time schedule specified by BNPM in the contract.

Any delay attributable to the supplier in maintaining its contractual obligations towards delivery of goods and performance of services shall render the supplier liable to any or all the following sanctions besides any administrative action such as (a) Imposition of liquidity damages; (b) Termination of contract for default.

**7. Extension of Time:** If the contract is delayed in the progress of work by changes ordered in the work, or any clause which BNPM shall decide to justify the delay, then the time of completion shall be extended by a reasonable time.



**OPEN TENDER ENQUIRY No. BNPM/OTE/199/2023-24**

If at any time during the currency of contract, the supplier encounters conditions hindering timely delivery of the goods and performance of services, the supplier shall promptly inform BNPM in writing about the same and its likely duration and make a request to BNPM for extension of the delivery schedule accordingly. On receiving the supplier's communication, BNPM shall examine the situation as soon as possible and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages for completion of supplier's contractual obligations by issuing an amendment to the contract.

- 8. Rejection Replacement:** In case of supplies, materials not meeting our specification will be rejected outright and the rejected material shall be taken back within 7 days at the cost and risk of the supplier and replacement should be made within 15 days from the date of intimation. No payment shall be made for rejected item. If the material is not taken back within the stipulate period, BNPM reserves the right to dispose-off the material at the risk and expense of the vendor as per provision under Section IV: General conditions of contract.
- 9. Risk Purchase Clause:** If the supplier fails to abide by the terms and conditions of the contract/agreement, or fails to supply the material as per the delivery schedule or any time repudiates the contract,

Procure the tendered item / render service from other agencies at the risk and cost of the supplier. The cost difference between the alternative arrangement and existing contract value wherein default has been made will be recovered from the supplier along with the other incidental charges.

In case of procurement through alternative sources, if procurement price is lower than the existing contract value wherein default has been made, in such case no benefit on this account will be passed on to the supplier.

- 10. Termination for Convenience (Foreclosure) Clause:** BNPM reserves the right to terminate the contract, in whole or in part for its (BNPM's) convenience, by serving written notice on the supplier at any time during the currency of the contract. The notice shall specify that the termination is for the convenience of BNPM. The notice shall also indicate inter-alia, the extent to which the supplier's performance under the contract is terminated, and the date with effect from which such termination will become effective.
- 11. Settlement of Disputes through Arbitration:** All disputes and differences of any kind whatsoever arising out of or in connection with the contract, whether during the progress of the work or after their completion except accepted matters shall be settled through arbitration process as per the Arbitration & Conciliation Act, 1996. The venue of arbitration shall be Mysore, Karnataka.



**OPEN TENDER ENQUIRY No. BNPM/OTE/199/2023-24**

- 12. Legal Jurisdiction:** The Courts of Mysore (Karnataka State) shall alone have jurisdiction to decide on any legal matter of dispute whatsoever arising out or in respect of the contract.
- 13. Force Majeure:** In the event of any unforeseen event directly interfering with the supply of stores arising during the currency of the contract, such as war, hostilities, acts of the public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts, or acts of God, the Contractor shall, within a week from the commencement thereof, notify the same in writing to the Purchaser with reasonable evidence thereof. Unless otherwise directed by BNPM in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. If the force majeure condition(s) mentioned above be in force for a period of 90 days or more at any time, either party shall have the option to terminate the contract on expiry of 90 days of commencement of such force majeure by giving 14 days' notice to the other party in writing. In case of such termination, no damages shall be claimed by either party against the other, save and except those which had occurred under any other clause of this contract prior to such termination.
- 14. Fore-Closure Clause:** If at any time during the continuation of this contract, the use of material ordered in this contract is completely banned or due to drastic change in Government policy its use as, raw material is discontinued or is declared hazardous to public health or cause rising to civil commotion, epidemics, wide-spread strikes and 21 days' notice of such eventualities is given by purchaser to the seller, the seller without any right to enforce the contract, will agree to the fore-close the performance of balance portion of this contract and in that event no claim for damages or loss will be lodged against the purchaser.
- 15. Rights of Rejection:** BNPMIPL reserves the right to reject any or all the applied bids without assigning any reason whatsoever. The enquiry can be rejected on national security grounds.



**OPEN TENDER ENQUIRY No. BNPM/OTE/199/2023-24**

**16. Price Bid Format:**

Sch. No	Material Description	UOM	Qty.	Unit Price (INR)	P&F, Insurance & Freight Charges (INR)	GST@ Amount (INR)	Unit price including P&F, Insurance, Freight & GST (INR)	Total price inclusive of P&F, Insurance, Freight & GST (F.O.R, BNPM, Mysuru) (INR)	Input GST Credit (INR) {GST amount * Total quantity}	Effective price inclusive of P&F, Insurance, Freight (F.O.R, BNPM, Mysuru) (INR)
A	B	C	D	E	F	G	H=E+F+G	I=H*D	J=G*D	K=I-J
1.	Three Phase Power Solid State Relay , 50A RMS <ul style="list-style-type: none"><li>Control Voltage : 4-32VDC with LED and current regulator</li><li>Output Voltage : 24-600VAC</li><li>Nominal Current : 50 Amps ( RMS) , Ie-AC-51 category</li><li>Peak Voltage : 1200V</li><li>Operating Frequency Range : 10-440 Hz</li><li>I2T : 2450 - 2800 A2s</li><li>Turn ON / OFF time : 10ms</li></ul>	Nos.	2							



**OPEN TENDER ENQUIRY No. BNPM/OTE/199/2023-24**

	<ul style="list-style-type: none"><li>• Built in IP20 - protection with Heat Sink</li><li>• TMS2 Back to back Thyristors technology</li><li>• Regulations : IEC/EN60947-4-x Compliant</li><li>• Approx. Dimensions : 76X100X56.5 mm ( WXHXD)</li><li>• Equivalent model (Part No - SVT965460E , Brand : Celduc , Datasheet enclosed )</li></ul>									
<b>Grand Total</b>										

**Note:** Evaluation shall be done on the basis of overall effective price quoted by the bidder





**OPEN TENDER ENQUIRY No. BNPM/OTE/199/2023-24**

**We hereby confirm that**

1. We accept all the terms & conditions mentioned in the enquiry.
2. Price quoted is inclusive of P&F, Insurance, Freight and GST on F.O.R Basis, BNPM Plant, Mysore.
3. HSN Code: Item .....
4. GST registration status: Unregistered / compounding / registered.
5. Delivery period: ..... (Days / Weeks)
6. Warranty Period: ..... Months (Time Period to be specified in case warranty period is less than 12 months / NA to mentioned in the in case warranty is not applicable)
7. Bid validity: 90 days from date of closing of tender including extensions/ corrigendum's (if any).

**8. Bank Details:**

Bank Acc. No. ....;

Bank Acc Name: .....

Branch name: .....; Branch Code: .....

IFSC: .....

9. MSME / NSIC status: ..... (If yes, then supporting document shall be submitted along with the offer to avail the benefits under the Procurement Policy for MSEs, Order 2012 along with its amendments.)

(Please fill above: MSI – For Micro Enterprises; SSI – For Small Enterprises; MED.SI – For Medium Enterprises; NSIC – For National Small Industries Corporation regd. firm)

Signature of bidder: .....

Name of the Firm: .....

Seal of the firm: .....

GST No.: .....

**Contact Details:-**

Contact Person: .....

Contact Number: .....



**(To be submitted on Company letterhead)**

**BID SECURITY DECLARATION**

We, the undersigned, declare that we will automatically be suspended from being eligible for bidding in any tender with Bank Paper Mill India Private Limited, Mysore for the period of 12 months, if we are withdrawing our Bid during the period of bid validity (or) fail / refuse to furnish the performance security / execute the contract, if awarded.

Signature \_\_\_\_\_

Name-----

Designation-----

Date-----

Stamp of the Organization-----



# Relais Statique Triphasé

## Three Phase Solid State Relays

### Entraxe 47,5mm / 47,5mm mounting

**SVT965460E**

24 to 600 VAC - 50ARMS

- Sortie AC Synchrones. / Adapté aux charges résistives.
- Commande 4-32VDC avec LED et courant régulé.
- IP20.
- Technologie thyristors TMS<sup>2</sup>
- Zero cross AC output. / Designed for resistive loads.
- 4 - 32VDC control voltage with LED and current regulator
- IP20 -
- TMS<sup>2</sup> Back to back Thyristors technology



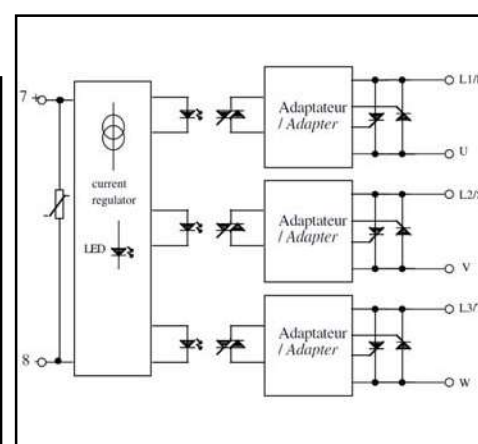
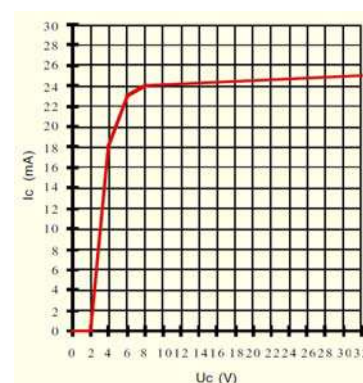
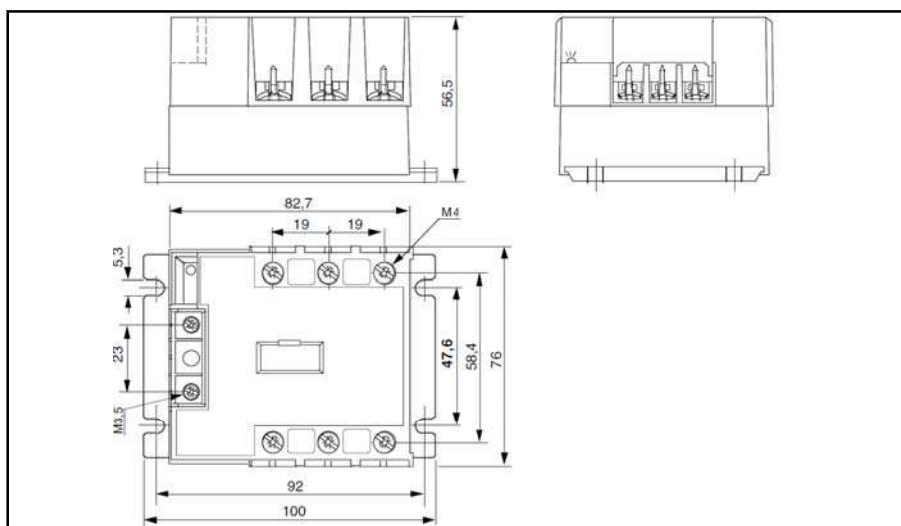
**Circuit équivalent/Equivalent circuit :**


fig. 1 :Caractéristique d'entrée /  
Control characteristic


**Dimensions / Dimensions:**

**Caractéristiques de commande (à 20°C) / Control characteristics (at 20°C)**

Paramètre / Parameter	Symbol	Min	Nom	Max	Unit
Tension de commande / Control voltage	Uc	4		32	V
Courant de commande / Control current (@ Uc)	Ic		<25		mA
Tension de relachement/Release voltage	Uc off	2			V
Résistance interne / Input internal resistor fig.1	Rc		Current regulator		Ω
Tension inverse / Reverse voltage	Urv		30		V

**Caractéristiques d'entrée-sortie (à 20°C) / Input-output characteristics (at 20°C)**

Isolement entrée-sortie/Input-output isolation @500m	Ui		4000		VRMS
Isolement sortie-semelle/Output-case isolation @500m	Ui		3300		VRMS
Tension assignée isolement/ Rated impulse voltage	Uimp		4000		V

**Caractéristiques générales / General characteristics**

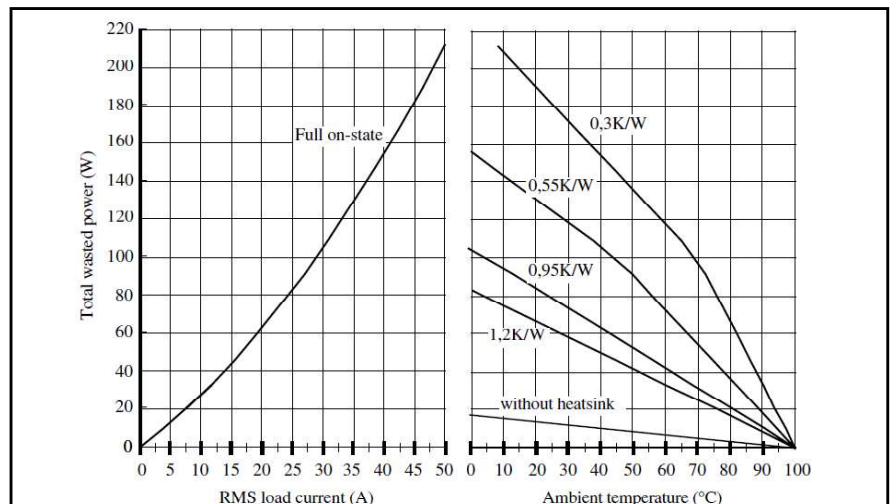
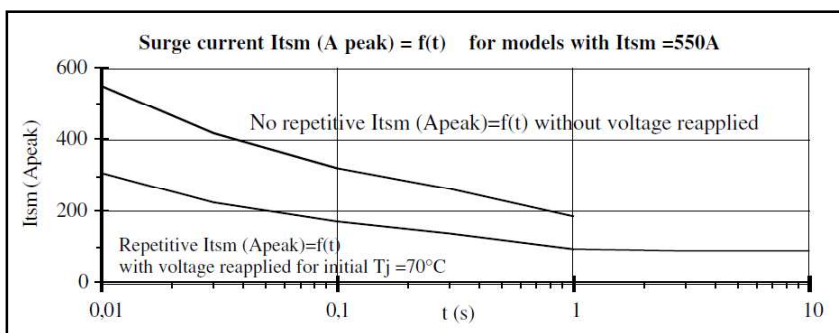
Paramètre / Parameter	Conditions	Symbol	Typ.	Unit
Poids/Weight			410	g
Plage de température de stockage / Storage temperature range			-40 / +100	°C
Plage de température de fonctionnement/Operating temperature range			-40 / +100	°C

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All technical characteristics are subject to change without previous notice.  
Caractéristiques sujettes à modifications sans préavis.

**Caractéristiques de sortie(à 20°C) / Output characteristics (at 20°C)**

Paramètre / Parameter	Conditions	Symbol	Min	Typ.	Unit
Tension de charge / Load voltage		Ue	400		V rms
Plage tension de fonctionnement / Operating range		Uemax	600		V rms
Tension crête / Peak voltage		Up	1200		V
Niveau de synchronisation / Synchronizing level		U <sub>sync</sub>	50		V
Tension d'amorçage / Latching voltage	Ie nom	Ua	10		V
Courant nominal AC-51/ AC-51 nominal current	( see Fig. 2 )	Ie AC-51	50		A rms
Courant de surcharge non répétitif /Non repetitive overload current	tp=10ms (Fig. 3)	I <sub>tsm</sub>	700	750	A
Chute tension directe crête/ On state voltage drop	@ Ie nom	Vd	1,4		V
Courant de fuite état bloqué/ Off state leakage current	@Ue, 50Hz	I <sub>lk</sub>	1		mA
Courant de charge minimum / Minimum load current		Ie min	5		mA
Temps de fermeture/ Turn on time	Uc nom DC ,f=50Hz	ton max	10		ms
Temps d'ouverture/ Turn off time	Uc nom DC ,f=50Hz	toff max	10		ms
Plage de fréquence / Operating frequency range		f	10-440		Hz
dv/dt état bloqué / Off state dv/dt		dv/dt	200		V/μs
dI/dt maximum non répétitif/ Maximum di/dt non repetitive		di/dt	50		A/μs
I <sup>2</sup> t (<10ms)		I <sup>2</sup> t	2450	2800	A <sup>2</sup> s
EMC Test d'immunité conduite / Conducted immunity level	IEC 1000-4-4 (burst)	2kV criterion B			
EMC Test d'immunité conduite / Conducted immunity level	IEC 1000-4-5(schocs)	2kV criterion A			
Conformité / Conformity	EN60947-4-x				

**Caractéristiques thermiques/  
thermal curves :**Fig.3 Courbes de surcharge de courant /  
Overload current curves

1 -I<sub>tsm</sub> non répétitif sans tension réappliquée est donné pour la détermination des protections.  
No repetitive I<sub>tsm</sub> is given without voltage reapplied for the determination of the protection.

2 -I<sub>tsm</sub> répétitif est donné pour des surcharges de courant (T<sub>j</sub> initiale=70°C). La répétition de ces surcharges de courant diminue la durée de vie du Relais.

Repetitive I<sub>tsm</sub> is given for inrush current with initial T<sub>j</sub> = 70°C. The repetition of the surge current decrease the lifetime SSR's .

**Précautions :**

\* Les relais à semiconducteurs ne procurent pas d'isolation galvanique entre le réseau et la charge.

**Cautions :**

\* Semiconductor relays don't provide any galvanic insulation between the load and the mains.





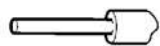


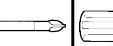
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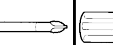
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Sales Dept.For Europe Tel. : +33 (0) 4 77 53 90 21 Sales Dept. Asia : Tél. +33 (0) 4 77 53 90 21

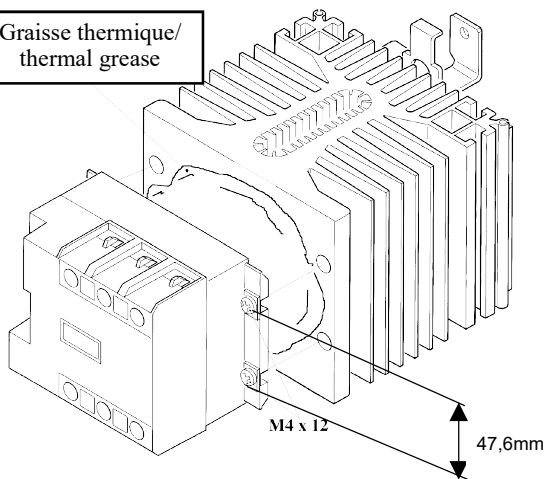
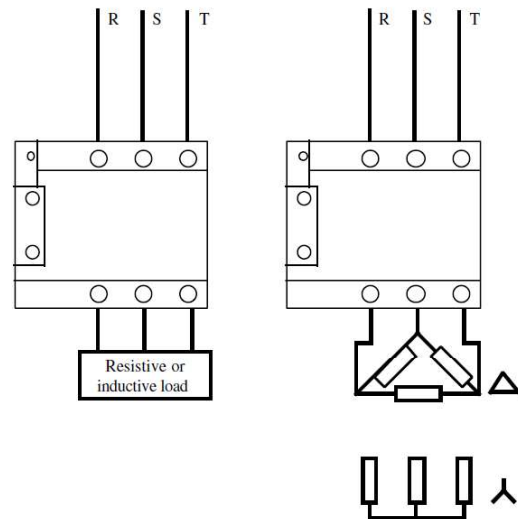


**SVT****Cablage commande / Wiring of the control circuit:**

nombre de fils/ NUMBER OF WIRES				SCREWDRIVER TYPE		MINIMUM TORQUE couple serrage  N.m
1		2		tournevis	tournevis	
SOLID (No ferrule) rigide sans embout	FINE STRANDED (With ferrule) multibrins avec embouts	SOLID (No ferrule) rigide sans embout	FINE STRANDED (With ferrule) multibrins avec embouts			
						
0,75 ... 2,5 mm <sup>2</sup>	0,75 ... 2,5 mm <sup>2</sup>	0,75 ... 2,5 mm <sup>2</sup>	0,75 ... 2,5 mm <sup>2</sup>	0,8 x 5,5 mm	POZIDRIV 2	1,2

**SVT****Cablage puissance / Wiring of the power circuit:**

NUMBER OF WIRES				SCREWDRIVER TYPE		MINIMUM TORQUE couple serrage  N.m
1		2		tournevis	tournevis	
SOLID (No ferrule) rigide sans embout	FINE STRANDED (With ferrule) multibrins avec embouts	SOLID (No ferrule) rigide sans embout	FINE STRANDED (With ferrule) multibrins avec embouts			
						
1,5 ... 10 mm <sup>2</sup>	1,5 ... 6 mm <sup>2</sup>	1,5 ... 10 mm <sup>2</sup>	1,5 ... 6 mm <sup>2</sup>	0,8 x 5,5 mm	POZIDRIV 2	1,8

Graisse thermique/  
thermal grease**Montage/ Mounting****Application typique /Typical application:**
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