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TAS POWERTEK PVT. LTD.

PRODUCT SPECIFIC IDENTIFICATION NUMBER POWER FACTOR CONTROLLER ORDERING GUIDE

SINGLE PHASE SENSING POWER FACTOR CONTROLLER

FOR CONTACTOR
SWITCHED SYSTEMS

LCPF - 02 / N / VLC

FOR THYRISTOR
SWITCHED SYSTEMS

TRPF - 02 / N / VLC

N Number of stages:
08, 16

L Load current CT secondary.
1 or 5 (for 1A or 5A)

C Capacitor current CT sec.
1 or 5 (for 1A or 5A)

V Feedback / supply voltage

0 63.5V In-phase
1 110V Quadrature
2 240V In-phase
3 415V Quadrature
4 110V In-phase
5 415V In-phase
6 **240V** Quadrature

In-phase mode is Phase-Neutral.

Quadrature mode is Phase-Phase.

Examples: LCPF-02/08/315, TRPF-02/16/355.

THREE PHASE SENSING POWER FACTOR CONTROLLER

FOR CONTACTOR
SWITCHED SYSTEMS

SPF - 35 / N / VLC / Va / Add

FOR THYRISTOR
SWITCHED SYSTEMS

TPF - 35 / N / VLC / Va / Add

N Number of stages:
08, 16

L Load current CT secondary.
1 or 5 (for 1A or 5A)

C Capacitor current CT sec.
1 or 5 (for 1A or 5A)

Va Auxiliary supply voltage
0 63.5V single phase ac
1 110V single phase ac
2 240V single phase ac
3 415V single phase ac

V Feedback / supply voltage

0 63.5V 3-phase, 4-wire
1 110V 3-phase, 3-wire
2 240V 3-phase, 4-wire
3 415V 3-phase, 3-wire

Add Additional features

C RS-485 (2nd port) with MODBUS protocol
F Data Logging
N No additional features.
S Special featured - Non standard type

Examples: SPF-35/08/315/3/N, TPF-35/12/355/2/C.



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PRODUCT SPECIFIC IDENTIFICATION NUMBER THYRISTOR SWITCH UNIT ORDERING GUIDE

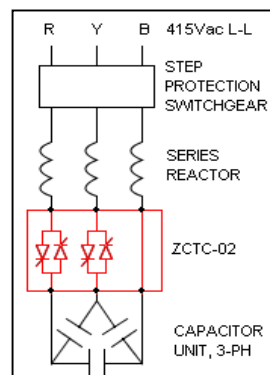
ZCTC-02, ZCCP-02 : 2-THYRISTORS IN LINE FOR DELTA

INDIVIDUAL THYRISTOR
SWITCH UNIT

ZCTC - 02 / A / R

- A** Normal current rating as per following:
- 040** Upto 25 kVAr, 415V, 3-ph capacitors
 - 080** Upto 50 kVAr, 415V, 3-ph capacitors
 - 120** Upto 75 kVAr, 415V, 3-ph capacitors
 - 160** Upto 100 kVAr, 415V, 3-ph capacitors

- R** Series Reactor compatibility Setting:
- 0.2** With 0.2% drop suppression reactors
 - 01** With 1% drop suppression reactors
 - 07** With 7% drop detuned reactors
 - 14** With 14% drop detuned reactors.
 - P** With 5.6% drop partially tuned reactors.

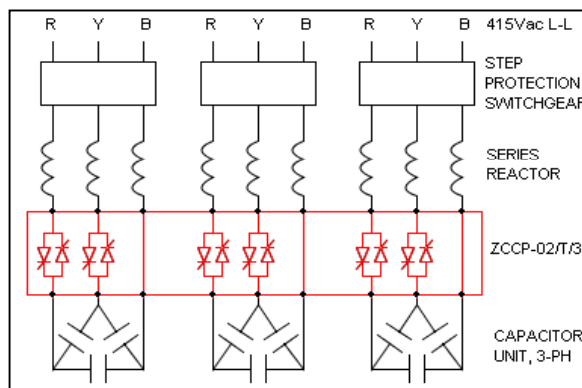


COMBIPACK
THYRISTOR UNIT

ZCCP - 02 / T / n / s1 / s2 / s3 / R

- T** Total kVAr of Combipack
n Number of steps (2 or 3).
s1 kVAr of step-1
s2 kVAr of step-2
s3 kVAr of step-3
 $T = (s1 + s2 + s3)$ not to exceed 100kVAr.

- R** Setting for series reactor:
- N** for reactor less than 1%
 - D** for reactor of 1% & above.



Standard Combipack Units:

T	s1	s2	s3	Product Specific Identification No.
25	5	10	10	ZCCP-02 / 25 / 3 / 5 / 10 / 10 / R
35	5	10	20	ZCCP-02 / 35 / 3 / 5 / 10 / 20 / R
50	10	20	20	ZCCP-02 / 50 / 3 / 10 / 20 / 20 / R
50	25	25	X	ZCCP-02 / 50 / 2 / 25 / 25 / R
70	10	20	40	ZCCP-02 / 70 / 3 / 10 / 20 / 40 / R
45	15	30	X	ZCCP-02 / 45 / 2 / 15 / 30 / R
60	20	40	X	ZCCP-02 / 60 / 2 / 20 / 40 / R



TAS POWERTEK PVT. LTD.

PRODUCT SPECIFIC IDENTIFICATION NUMBER ORDERING GUIDE

ASSOCIATED CONTROLLERS

AUTO MANUAL CONTROLLER

AMB - nn / Typ

nn Number of steps of capacitor bank to be controlled.
08 or 16

Auto manual controller can be ordered along with PF controllers (single or three phase).
This can be used where manual operation is also required along with auto operation.
Also order for SMPS-40/12 along with the AMB.

Typ Output type.

- C** Contactorised Output Potential free contacts.
- T** Thyristorised Control Output Solid state +12V DC signal.

STREET LIGHT CONTROLLER

SLC - 04 / C /Typ / add

C CT Ratio.

- 1** 1Amp CT connection
- 5** 5Amp CT connection.

Typ Type of operation.

- 01** Simple On Off timing control operations. No electrical measurement.
- 02** On / Off control with time based energy saving. No measurement or voltage control
- 03** Voltage control with servo control auto-transformer. All measurements present.
- 04** Voltage control with autotransformer output voltage tap changeover voltage control.

add Additional features.

- F** 256MB+ Flash data logger in built
- C** MODBUS communication RS-485 additional port.
- N** No additional features.

LOAD MANAGER

LM - xx / VL / Va / Add.f

XX Phase - single or three phase.
01 or 03 (single or 3-phase)

V Feedback / supply voltage

- 0** 63.5V 3-phase, 4-wire
- 1** 110V 3-phase, 3-wire
- 2** 240V 3-phase, 4-wire
- 3** 415V 3-phase, 3-wire

L Load current CT secondary.
1 or 5 (for 1A or 5A)

Va Auxiliary supply voltage

- 0** 63.5V single phase ac
- 1** 110V single phase ac
- 2** 240V single phase ac
- 3** 415V single phase ac

Add.f Additional features

- C1** Capacitor current feedback 1Amp CT
- C5** Capacitor current feedback 5Amp CT
- .f8** 8 capacitor steps feedback
- .f16** 16 capacitor steps feedback
- F** 256MB Flash data logger in built
- G** GSM compatible (without modem)
- CM** Addition RS-485 port with MODBUS.
- N** No additional features.

Examples: LM-03/35/3/C1.f16, LM-01/21/2/N

TAS POWERTEK PVT. LTD.

PRODUCT SPECIFIC IDENTIFICATION NUMBER ACCESSORY REQUIREMENTS ORDERING GUIDE

ACCESSORIES FOR THYRISTOR UNITS & PF CONTROLLERS

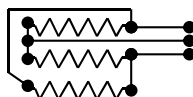
DISCHARGE RESISTOR MODULES FOR FAST
RESPONSE OF THYRISTOR UNITS

DISR - n

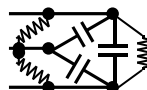
n DISR type number.

N Normal delta connected resistors with 36KOhm values. Suitable for ZCTC-02

DISR - N: circuit:



Config:

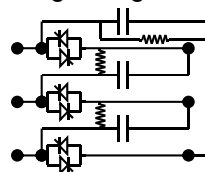


I Open connections of resistors. Useful with Intra-switching configuration.

DISR - I: circuit:



Config:



SWITCHED MODE POWER SUPPLY

SMPS - va / 12

va Volt-ampere rating of 12Vdc output SMPS.

40 Standalone SMPS with 415V input supply.

30 SMPS PCB board with 20Vac input. Used within ZCCP-02, ZCTC-03 units.

20 SMPS PCB board with 20Vac input. Used within ZCTC-02 unit.

For 30VA and 20VA SMPS order the transformer separately if required.

TRANSFORMER FOR SMPS

TRAFO - va / 12

va Volt-ampere rating of transformer to be coupled with associated SMPS.

30 Transformer 415V/20V, 30VA for use with SMPS-30/12.

20 Transformer 415V/20V, 20VA for use with SMPS-20/12.

Both type of transformer are provided in open execution. Use with correct rating of SMPS PCB.

SNUBBER CIRCUITS

SNUBBER - thy PSIN

thy Type number : PSIN of the thyristor switch along with step kVAr

PSIN Snubbers for thyristor switch units must be specified with the kVAr of the capacitor unit/bank.

Zero voltage Thyristor

TSC- R

Firing Module

Thyristor firing module TSC

R Decides the rated current of the module. 040, 080, 120, 160

The current is dependent on kVAr rating of capacitors at defined voltage.



Product Specific Identification Number for TAS PowerTek Lighting optimisior systems:

Basic Model	Amp	Line V	React	PF con	TAP sel					
					Max reduction	80%	65%	50%		
					Denote	80	65	50		
					With PF					
					No PF	Fixed	One step		Two step	Three step
					PFN	PFO	PF1	PF2	PF3	
					O/p reactors for Amp inrush		Without Reactor			
					Denote		R	N		
					Voltage System	240V single phase 50Hz	415V 4-wire 50Hz	480V 4-wire 60Hz	220V 3-wire 60Hz	220V 2-wire 60Hz
					Denote	V1	V2	V3	V4	V5
Current Rating, Indicate Output Amp AC loading with full voltage.										
Denote Amp in 3 digits:		Examples:		8Amp	18Amp	140Amp	250Amp			
				008	018	140	250			
Model Type		Intelligent Street Lighting	Intelligent Indoor Lighting	Intelligent Multiple area control.	Fixed or Manual type.	Servo Control Intelligent				
		LCES-S	LCES-I	LCES-M	LCES-F	LCES-V				
Example:	LCES-I/012/V1/N/PFO/80		Means "Intelligent indoor lighting system with 12Amp rating, 240V 1-ph supply, without output reactors, with fixed capacitor for PF improvement and with maximum 80% reduction in voltage" model type.							