

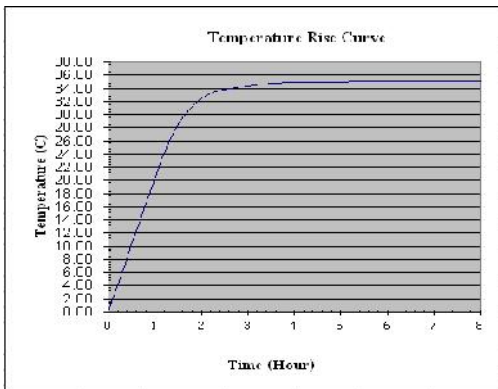
Specification : Transformer & Power Supply for Electronics Security Type.

Model :PD-01-01 *Engicon*

Introduce

Electronic security system is very important today because a system can help you in monitoring, detecting or controlling things in the area of a running system but electronic security system must work 24 hours for such purposes we much needed in the selection of high quality equipment used in the system for performance optimization.

PPCTECH Co.,Ltd. is produced about transformer, power supply, adaptor for electronic security system we specifically designed for use 24 hours we design and support power supply to a company with a leading system integration company in Thailand we supply adaptor power supply to distributors of CCTV camera brand American, Europe and Japan.

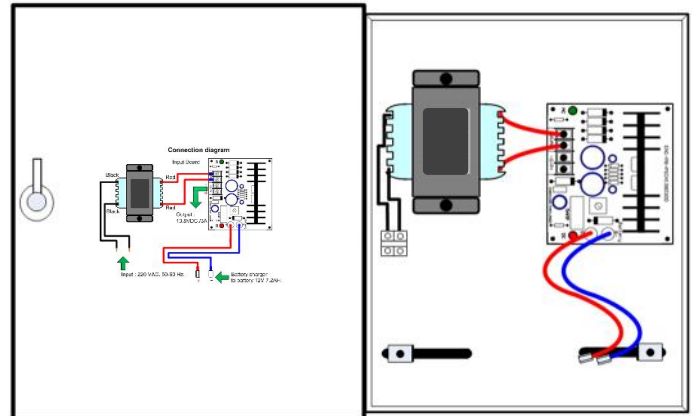


Model: PD-01-01On 25 °C Ambient

Power Supply for Electronic Security System may be used in a different by depending on the electrical properties of equipments such as cameras which use the adaptor of AC and DC, access control use power supply /with charger because they want battery backup and supply to other equipments such as reader, magnetic lock, finger scan, fire alarm system need to power supply for difference current for difference side if you need to power supply for other equipment please contact us from telephone or E- mail as below.

Power Supply Option

- PD-01 → BPD-01 +TS16-4
- PD-01-YYB
- YY = 01 → BPD-01 +TS16-4 + indoor box dimensions(W=22, H=28, D = 10 cm)
- YY = 02 → BPD-01 +TS16-4 + indoor box dimensions(W=22, H=28, D = 10 cm)+ Breaker10A
- YY = 03 → BPD-01 +TS16-4 + indoor box dimensions(W=32, H=44, D = 10 cm)
- YY = 04 → BPD-01 +TS16-4 + indoor box dimensions(W=32, H=44, D = 10 cm) Breaker10A
- YY = 05 → BPD-01 +TS16-4 + Outdoor box dimensions(W=25, H=35, D = 15 cm)
- YY = 06 → BPD-01 +TS16-4 + Outdoor box dimensions(W=25, H=35, D = 15 cm) Breaker10A
- B → Include battery 12V7.5AH



Design Principles

Electronic security system that demands high stability, equipment used in the system must have high quality and good compatibility if some equipments do not have the quality it's effect to the system was not stable.

Many system integrators may see transformer, adaptor power supply is less important in the system but actually, these equipments are also important as well. Because if they do not have quality equipment will make no quality system although the use of other equipments high quality.

PPCTECH Co., Ltd.'s products quality and specializes for transformers and power supply to use for the actual environment we select quality electronic part to products adaptor power supply and design for low magnetic flux density transformer to reduce residual magnetism so transformer is less heat and long life more than transformer in general.

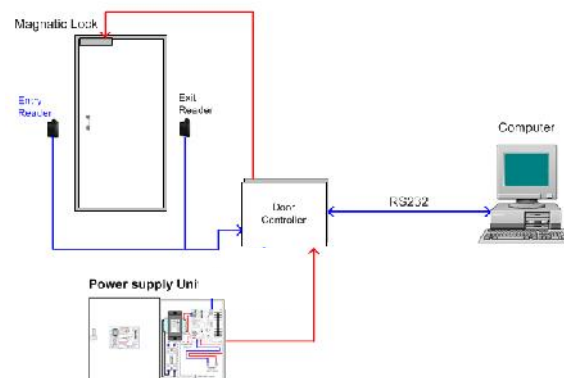
Transformer Design Equation

$$N_p = \frac{V_{in}}{4.44 f B A}$$

$$N_s = \frac{V_{out}}{4.44 f B A}$$

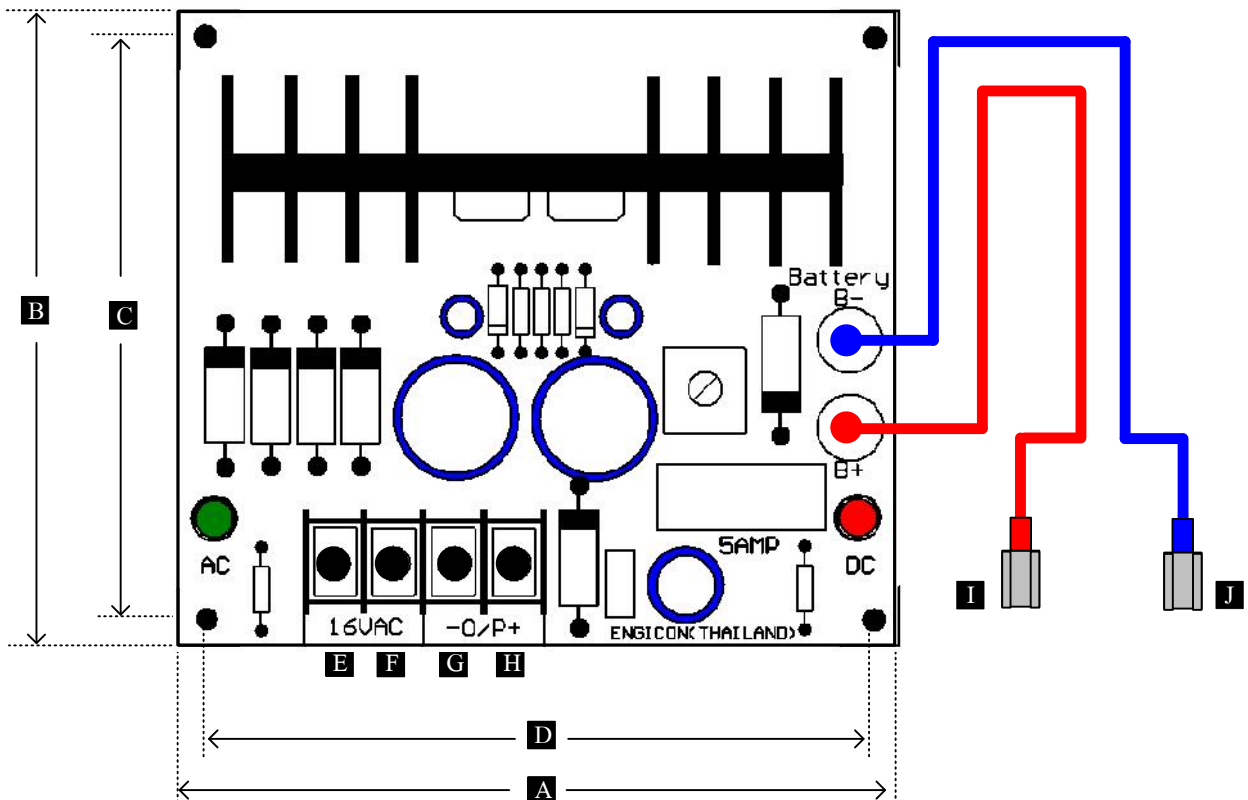
N_p :	Primary Turn Turn.
N_s :	Secondary Turn Turn.
f :	Line Frequency Hz.
V_{in} :	AC. Input Voltage Volt.
V_{out} :	AC. Output Voltage Volt.
B :	Flux Density Wb/mm. ²
A :	Cross Section Areas m. ²

Transformer design will set B : Flux density low or set turn of transformer more than general transformer for reduce residual magnetism of transformer so transformer is less heat than transformer in general.



Access control system diagram

Specification : AC to DC power supply Electronic Security Type.

Model :BPD-01


Character	Description	Unit mm/inch
A	Length of Power Supply/Charger Board	95/3.74
B	Width of Power Supply/Charger Board	85/3.35
C	Holes for Holing Dimension1	77/3.03
D	Holes for Holing Dimension2	87/3.43
F E	Input16 Vac./4A from TS16-4,0	
G	Output : - 0 VDC	
H	Output : +13.8 VDC. 3A	
I	Terminal for Battery Charge + (12 V)	300/11.8
J	Terminal for Battery Charge - (0V)	300/11.8

LED Indicators

Red(DC)	Green(AC)	Power Supply Status
ON	ON	Normal Operating Condition.
ON	OFF	Lost of AC, Battery is Supplying Power.
OFF	ON	No DC. Output or Lost of Fuse.
OFF	OFF	No DC. Output, Lost of AC., Discharged or No Battery Present or Lost of Fuse.

Product Specifications

Input Voltage :	16 Vac., 4A, 50-60 Hz.
Output Voltage :	13.8 Vdc.
Output Current :	3.0 A.(2.2A Continuous)
Output Power (VA) :	42 W.
Short-Circuit Protection :	Output Fuse 5A, Thermal Over Load ,Output Short Circuit Protection.
Temperature Rise :	35 °C.
Steady State Times :	124.2 mS.
Power Status Show :	LED indicators for AC input and DC Output
Dimensions :	95 mm/3.74" X 85 mm/3.35" X 40 mm/1.58".
Weight :	0.2 kg.
Ambient Operating Temp. :	0-55 °C.
Input Connection :	Terminal
Output Connection :	Terminal
Battery Charger Connection:	With Lead Line and battery connector

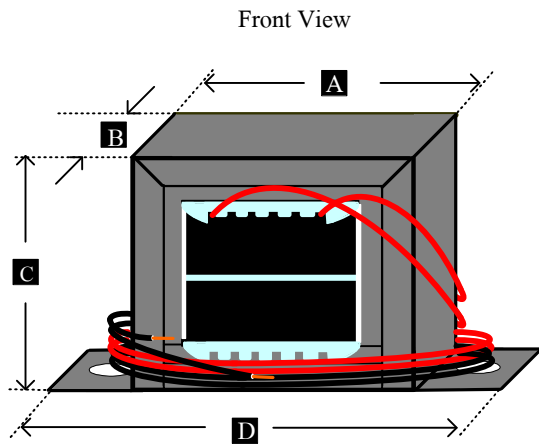
- Power consumption must not exceed 30 watts when used at all times (24 Hr).
- Product design for Access control system, outdoor CCTV on outdoor box

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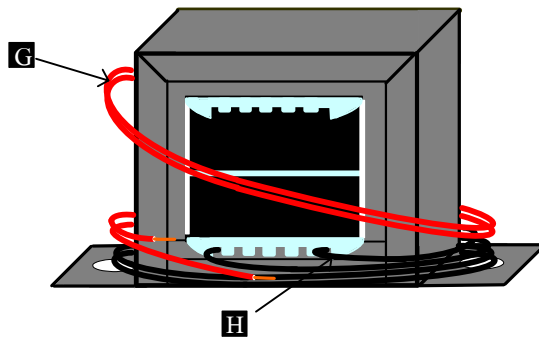
Company logo Sealed	Approved by :
	Position :

Specification : Transformer for Electronic Security Type.

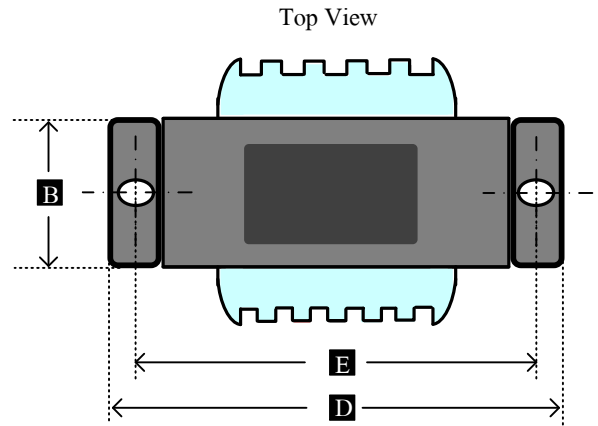
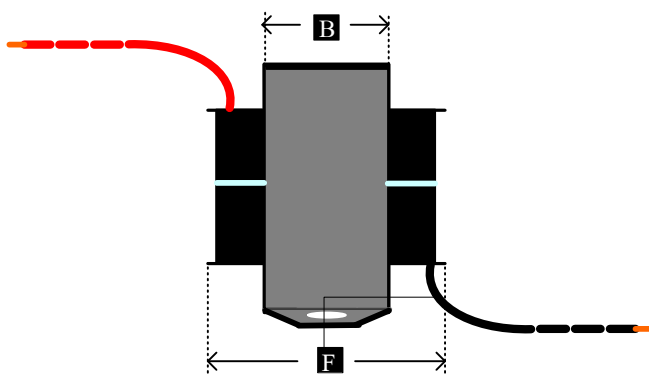
Model : TS16-4



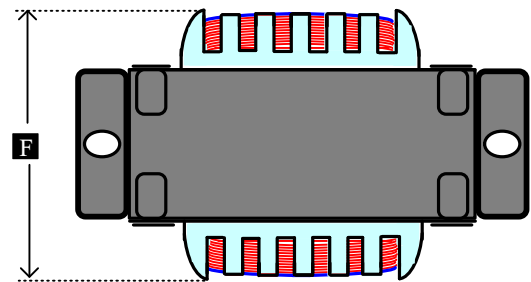
Rear View



Side View



Bottom View



Character	Description	Unit mm/inch
A	Transformer Dimension	78 /3.07
B	Transformer Dimension	44/1.73
C	Transformer Dimension	66/2.59
D	Transformer Dimension	110/4.33
E	Transformer Dimension	95/3.84
F	Transformer Dimension	73/2.87
G	Output Conneciton 16 VAC50-60 Hz. 4A.	300/11.81
H	Input Connection 220 VAC 50-60 Hz.	Length

Product Specifications

Input Voltage :	220 Vac. ,350 mA, 50 Hz.
Output Voltage :	16 Vac.
Output Current :	4.0 A. (3A continuous)
Output Power (VA) :	64 VA.
Flux density :	1.10 Wb/m ²
Temperature Rise :	27 °C.
Steady State Times :	4.20 mS.
Dimensions :	110 mm/4.33" X 58 mm/2.28" X 66 mm/2.59"
Weight :	1.65 kg.
Ambient Operating Temp. :	0-55 °C.
Input Connection :	Black colour lead wire
Output Connection :	Red color lead wire

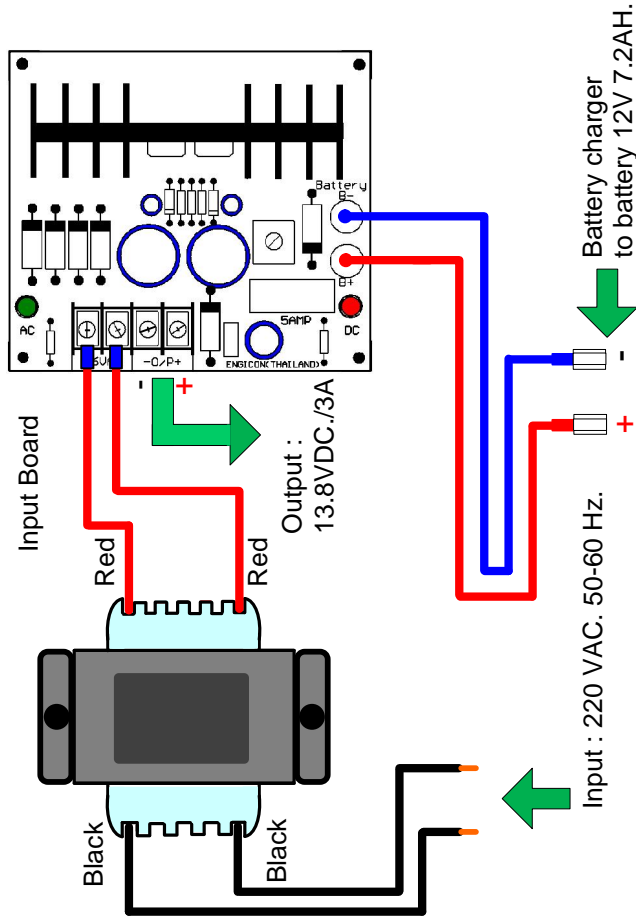
* Transformer for Input Power supply for Access control

Model : PD-01, PD-02, PD-03

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Connection diagram



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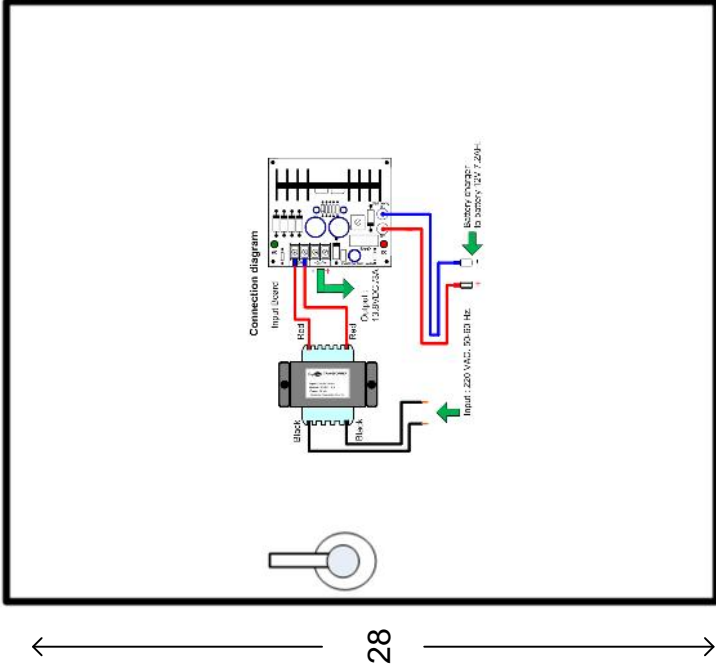
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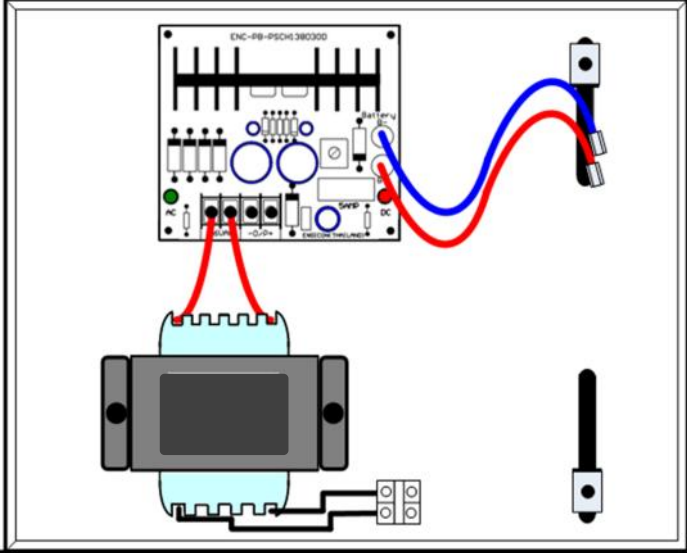
48/238 Moo 4, Petchkasem Rd., Omyai, Sampran District, Nakhon Pathom, Thailand 73160

PROJECT NAME: Special Product for Access Control	DRAW BY : Mr. Toedsak Thothonng
PRODUCT ID: PD-01	CHECKED BY :
PRODUCT DSC: Power Supply for Access control	APPROVED BY : Mr. Tearak Puttarak
DRAWING TITLE : Connection Diagram	
DRAWING NO	SCALE : None
	DATE : 20/10/58
	DRW:

22




28



27.5

21.5

Unit : Cm.

	48/238 Moo 4, Peichkasem Rd., Omyai, Sampran District, Nakhon Pathom, Thailand 73160	
	PROJECT NAME : Special Product for Access Control	DRAW BY : Mr. Toedsak Thoithong
	PRODUCT ID : PD-01-01	CHECKED BY :
	PRODUCT DSC : Power Supply for Access control	APPROVED BY : Mr. Teprarak Putterarak
DRAWING TITLE : PD-01-01B on Indoor Box	DRAWING NO	SCALE : None
:01	DATE : 20/10/58	DRW:

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	Position :