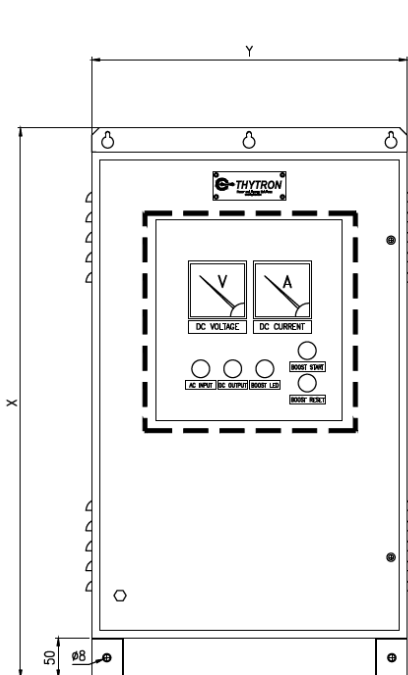




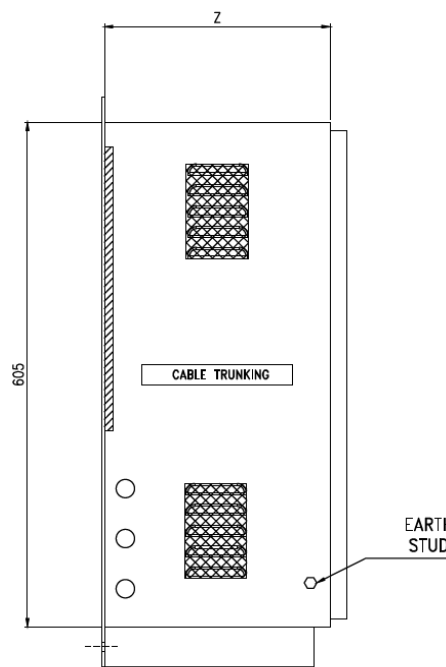
THY-W Wall Mounted / Floor Standing Series use Thyristor Control Technology that provides DC power for Engine Starting, Power Plant , Telecommunication , Oil and Gas applications. Charger system offer options of Full Filtering series .

The Thyristor Rectifier is a solid state power unit with Constant Voltage Current Limiting features completed with following major characteristics:-

- Overload protection to 110% load.
- Output voltage remains constant even affected by irregularity of In-coming AC voltage supply and frequency.
- Output regulation remains constant when load varies from 0%~100% of its rated value and battery is kept fully charged.
- The unit is protected against accidentally short circuit and reverse polarity connection of battery.
- Soft start feature to prevent output voltage overshoot.
- Low ripple output voltage .
- Units is protected against lightning surges by surge absorber.
- Isolation Transformer allows positive earth or negative earth connection



FRONT VIEW



LEFT SIDE VIEW



## Charger Model

Model Number	DC Output		AC Input Current Draw* at 100% Load (Amps)			AF Case No.	A40F Shipping Weight (Approximate)	
	Amps	Volts	@	@	@		lbs	kgs
			120 Vac	208 Vac	240 Vac			
<b>THY-W12V</b>								
THY-W12V-10A	10	12	1.4	0.8	0.7	1	84	38
THY-W12V-20A	20	12	2.8	1.6	1.4	1	93	42
THY-W12V-30A	30	12	4.1	2.4	2.1	1	101	46
THY-W12V-40A	40	12	5.5	3.2	2.8	1	115	52
THY-W12V-50A	50	12	6.9	4.0	3.4	1	132	60
THY-W12V-60A	60	12	8.3	4.8	4.1	1	159	72
THY-W12V-70A	70	12	9.6	5.6	4.8	1	172	78
THY-W12V-80A	80	12	11.0	6.3	5.5	1	185	84
<b>THY-W24V</b>								
THY-W24V-10A	10	24	2.8	1.6	1.4	1	99	45
THY-W24V-20A	20	24	5.5	3.2	2.8	1	115	52
THY-W24V-30A	30	24	8.3	4.8	4.1	1	132	60
THY-W24V-40A	40	24	11.0	6.3	5.5	1	159	72
<b>THY-W30V</b>								
THY-W30V-5A	5	30	1.7	1.0	0.9	1	84	38
THY-W30V-10A	10	30	3.4	2.0	1.7	1	93	42
THY-W30V-20A	20	30	6.9	4.0	3.4	1	134	61
THY-W30V-30A	30	30	10.3	5.9	5.2	1	156	71
<b>THY-W48V</b>								
THY-W48V-10A	10	48	5.5	3.2	2.8	1	115	52
THY-W48V-20A	20	48	11	6.3	5.5	1	128	58
THY-W48V-30A	30	48	16.5	9.5	8.3	1	148	67
<b>THY-W110V</b>								
THY-W110V-5A	5	110	6.3	3.6	3.15	1	84	38
THY-W110V-10A	10	110	12.6	7.3	6.30	1	93	42

Case sizes may differ depending on optional accessories. Please consult factory when dimensions are critical. Dimensions shown above are overall footprint. Detailed dimension drawings are available for mounting purposes.

## AF Charger Dimension

Case No.	Overall Dimensions						Cable Entry (when facing unit)		Mounting
	Width		Depth		Height		AC Input	DC Output	
	in	mm	in	mm	in	mm			
1	15.5	390	11.4	290	26.7	680	LEFT/RIGHT /BOTTOM	LEFT/RIGHT /BOTTOM	WALL/FLOOR

## TECHNICAL SPECIFICATION.

Charger Type	:	Transformer Isolated Thyristor control.
Input Voltage	:	120Vac /208Vac / 240 Vac +/- 10 % , Single phase .
Input Frequency	:	50 or 60 Hz +/- 5%.
Output voltage	:	12/24/30/48/110V dc (adjustable).
Float voltage	:	2.27V/cell dc (adjustable)
Boost voltage	:	2.33 V dc (adjustable with timer )
Output Voltage Stability	:	+/- 1% from 0-100% DC load at AC input voltage variation of +/- 10 % and frequency variations of +/- 5%.
Ripple Voltage	:	less than 2 % rms .
Control	:	Constant voltage, current limited to 110% .
Metering	:	D/C voltmeter, D/C ammeter.
Indicator	:	Mains on,
Mcb	:	Input Mcb/ Output MCB
Overload Setting	:	Current limited to 110% of the rated current.
Radio Frequency interference	:	In accordance with VDE 0875G.
Cubicle	:	IP 20 standard,1.2 mm Thick GI mild steel c/w frame structure, with epoxy coated in bright color. Anti rust protection coating.
Cable entry	:	Bottom entry/side entry.
Ventilation	:	Force Air Cooling .
Operation Temperature	:	10°C~40°C Degree, for 40°C~ 55°C, derated 1% per °C.
Altitude	:	Up to 1000 m
Humidity	:	0 ~ 95% relative humidity.
Dimension	:	Refer to drawing.
Construction	:	Component acces from front.
Grounding	:	Float, Positive or Negative earth.
Noise	:	less than 65 dB.

## PROTECTION

Lightning Surge arrested at the input to prevent lightning strike going into load system.

Input and output fuse protection to protect short circuit current.

Current Limiting to prevent on drawing immense current to battery after power recovered, further to prevent surge DC Current in the charger.

Soft-start to prevent on surge DC voltage to avoid damaging to load system.

Reverse Polarity protection by fuse.

## OPTIONAL

Low voltage disconnect device to protect battery from over discharge