



TeleMoment

TDC

Industrial DC Rectifier
24/48/110/220 Vdc

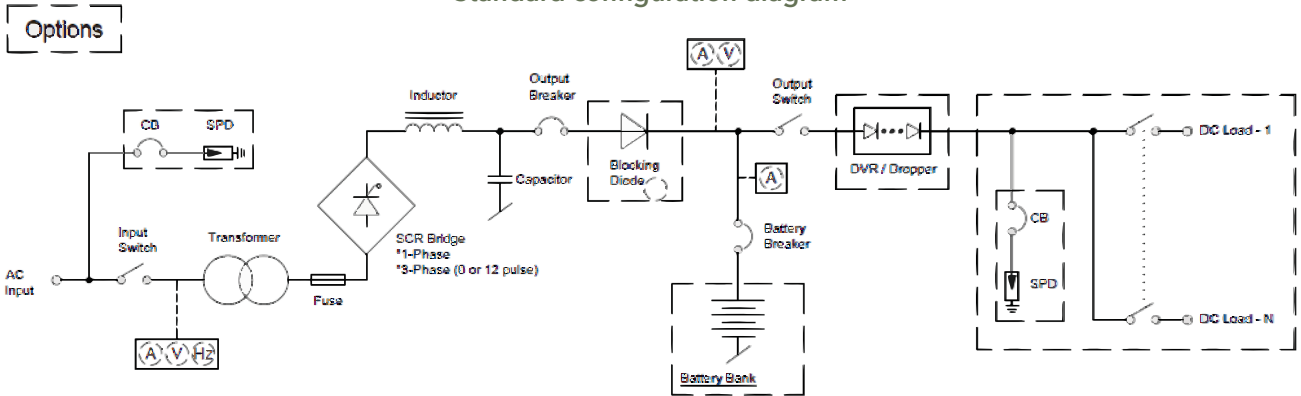


MAIN FEATURES

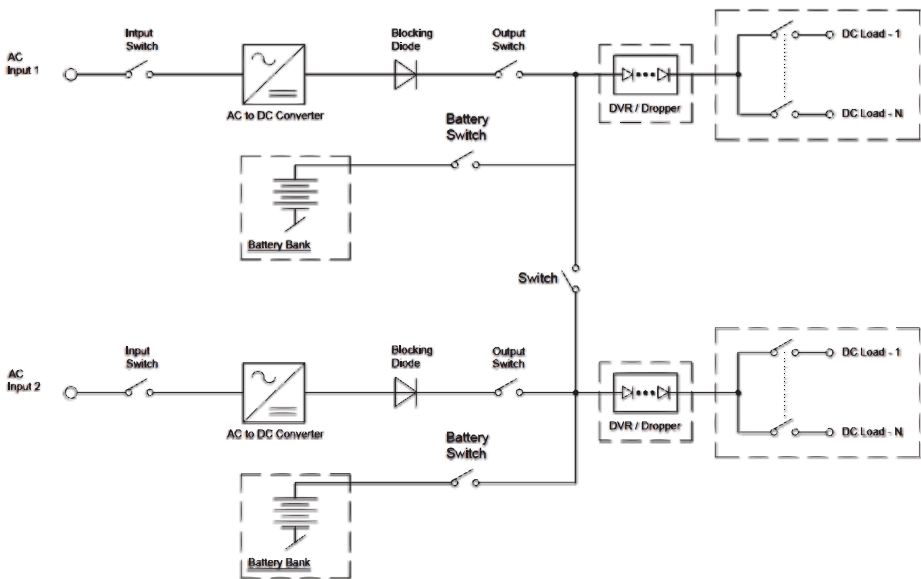
- SCR Rectifier surviving rough environments
- Application: Battery charger, DC UPS or DC Power Supply
- Fully digital control, very flexible Boost/float charging modes
- Trouble-free, almost zero maintenance requirements

Signal-line Diagram

Standard configuration diagram



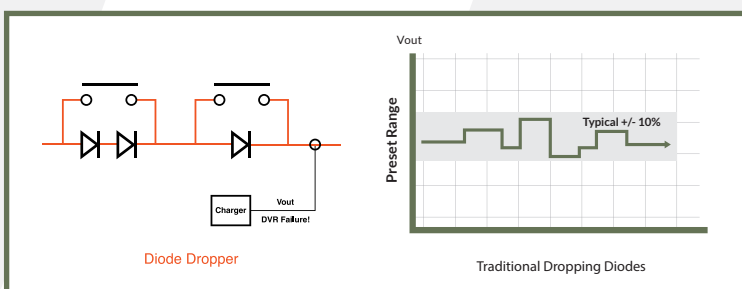
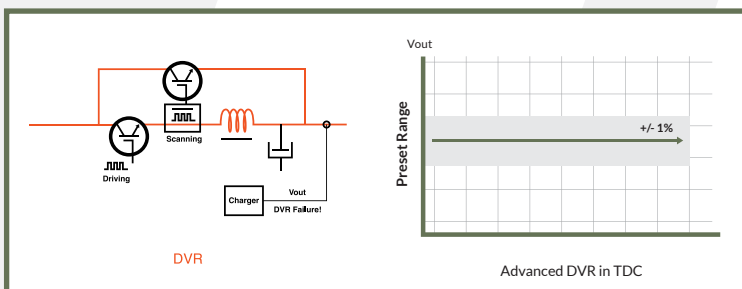
Parallel configuration diagrams



The TDC series Rectifier/Chargers can be operated in parallel configuration.

- Natural parallel without the requirement interchange of signal or communication between the two rectifier/chargers, just to enable the parallel operation when needed without any further settings
- Automatic load sharing of output current

DVR / Diode Dropper



The DC Voltage Regulator (DVR) is a great option to be installed between the output of the rectifier and the load to prevent any unwanted high voltage at the load side. Compared to traditional dropping diodes, DVR employs high-frequency switching technology for precise voltage control and a double bypass circuit to increase reliability.

Benefits of using Advanced DVR

- Highly reliable
- Very high efficiency
- Long operation life due to static components
- A speedy response that removes any high voltage from the load side

Robust Mechanical Design

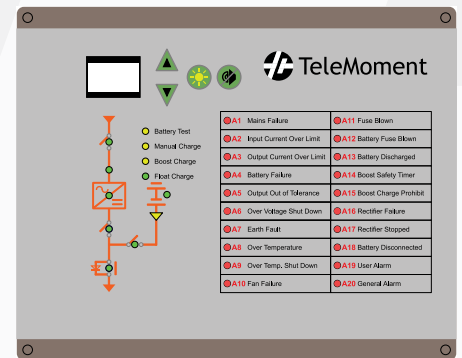
A robust cabinet is essential for industrial application, especially in rough environments.

TeleMoment TDC industrial rectifiers are housed in a cabinet of a solid frame and built with a 2mm metal sheet. It can be easily transported by using a forklift. The base frame lifts the whole floor unit by 100mm and provides easy floor mounting or fixing. A good balance between safety and accessibility has been achieved. IP42 is our standard, and optional IP54 cabinets are available as an option.



Intelligent Digital Panel (IDP)

- Connect with Intelligent devices via Wifi, ethernet, MODBUS
- Switchable wireless connection with handheld intelligent devices
- Accessible charger settings and configuration via an intuitive interface
- Downloadable history log for easy backup
- Local Mimic, LCD display & LED lights for alarm & status check



Standard Models Specifications

SINGLE Phase Input	OUTPUT VOLTAGE (V)	24, 48, 110, 220
	OUTPUT CURRENT (A)	50, 100, 150, 200, 300, 400, 500

THREE Phase Input	OUTPUT VOLTAGE (V)	24, 48, 110, 220
	OUTPUT CURRENT (A)	50, 100, 150, 200, 300, 400, 500, 600, 800, 1000

Options

- IP54 cabinet
- DVR/ Dropping diodes
- 12-pulse and 24-pulse Rectifiers
- Branch Circuit Earth Fault monitoring
- Battery temperature compensation
- Anti-Condensation heater
- Output DC distribution
- External Meter Display
- Customization design

INTERNATIONAL STANDARDS: - IEC 60146-1-1:2009
 - IEC 60076
 - IEC 60529

General Specification

Rectifier / Charger Type	Thyristor (fully controlled bridge)	
Rated Input voltage range	AC 220V / 230V / 240Vac 1phase +/- 10%	AC 380V / 400V / 415Vac 3phase +/- 10%
Rated frequency	50Hz +/-10%	
Charging operating control	Boost and floating charge, automatic or manual operation According to DIN41773	
Standard	As per latest edition of applicable IEC-60146	
Continuous current rating	110% of rated current	
Efficiency	Up to 94% depending on type	
Output DC Voltage regulation	+/-1% for 10% input voltage variations and 5 – 110% load variations	
Ripple voltage	Less than 1% rms (Optional without battery)	
Cooling system	Forced, Natural ventilation as option	
Operating temperature	0 - 40 degree Celsius	
Humidity	95%	
Audible noise	<=/= 60 dB	
Control characteristic	Constant voltage with current limitation, DIN41773	
Protection and Controls	<ul style="list-style-type: none"> a. Input and output maintenance circuit breaker b. Soft Start (Short circuit protection slow starts device) c. Total Output Current limit d. Battery Charging Current limitation e. DC over/under voltage f. AC over/under voltage g. Input over current h. Control circuit fuses i. Front access replaceable DC capacitors 	
Meters (Via Intelligent Digital Panel IDP) (Extra measurement can be read through webpage)	<ul style="list-style-type: none"> a. AC input voltage / current b. Rectifier output voltage / current c. Battery current d. Battery temperature (option) 	
Material cabinet	IP42, Epoxy coated sheet steel >=/= 2mm thickness	

