

# M553-CTXDC MULTIFUNCTION TRANSDUCER WITH RS485 COMMS & RELAY OUTPUT

**HOBUT**

## DESCRIPTION

The M553-CTXDC PowerCom is a multifunction dc power transducer, providing RS485 Modbus communication and a pulsed output in a 55mm DIN enclosure.

## APPLICATION

The M553-CTXDC has a universal power supply which is suitable for AC or DC auxiliary voltages. The M553-CTXDC covers a wide range of voltage inputs and current inputs. The current input can be up to 5 amps direct or any value using a mV input  
Example: a shunt of 2000A DC with 50mV output.



## PARAMETERS MEASURED

- DC Voltage (V)
- DC Current (I)
- DC Power (kW)
- DC Import Energy (kW.h)
- DC Export Energy (kW.h)
- DC Ampere Hours (A.h)
- DC Amp Demand (Ad)
- DC Max Amp Demand
- DC Power Demand (kWd)
- DC Max Power Demand
- DC Export Power Demand (kWd)
- DC Max Export Power Demand (kWd)
- Hours Run (Voltage based)

## ORDERING INFORMATION

Information required	Example
Product Code	M553-CTXDC
Nominal input current	50mV
Nominal voltage	800V
Option	Pulsed Output*

\* If two pulse output required the RS485 will be removed - relay to be configured at factory

Standard nominal inputs:

Voltage 60V, 150V, 300V, 800V

Current (using external shunt) 50mV, 60mV, 75mV, 100mV

## COMMUNICATION

The M553-CTX uses the well established Modbus protocol. This enables remote reading and programming of the M553-CTX using a host computer.

The RS485 network allows up to 32 units to be connected in parallel, enabling them to be used with PC, PLC, RTU, Data loggers and Scada programs.

The PowerCom's communication port incorporates an auto-configure function which, when connected to an existing Modbus network, will automatically detect the network's parameters.

A red LED is provided to indicate that auxiliary power is present, and that the unit is communicating correctly.

## PROGRAMMING

The following can be programmed via the RS485 port: current inputs, voltage input, demand times, assign relay.

## SOFTWARE

MultiView set-up and monitoring software is available free of charge from our web-site: [www.hobut.co.uk](http://www.hobut.co.uk)

## PULSED OUTPUT

An optional pulsed output can be ordered. The relay can be assigned to kW.h (import/export), A.h or it can be configured to act as set-point relay in an over, under or window mode.

Our policy is one of continuous development and therefore specifications may change without notice.

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## GENERAL SPECIFICATION

### INPUT

Rated Un	Directly connected: 800V DC, 300V DC, 150V DC or 60V DC
Range	2-120% Un
Overload	120% Un
Rated In	mV DC, 1A DC or 5A DC
Range	2-120% In
Overload	120% In
Overload	2 x In for 1 second

### ACCURACY

Specified @ 23°C	10-100% Un, 10-100% In
Parameters unless stated	Class 0.3% to IEC 688
Volts and Amps	Class 0.25% to IEC 688
Energy	1% of reading to IEC 1036

### INSULATION

Installation category	III
Degree of pollution	2
Rated impulse withstand voltage	IEC60947-1-V imp:4kV
Electrical security	IEC 61010-1
Inputs + Aux to case	3kV rms 50Hz for 1 min
Inputs + Aux to RS485	3kV rms 50Hz for 1 min
Inputs + Aux to relay	1k5V rms 50Hz for 1 min

### ENVIRONMENTAL

Working Temperature	0 to +60 deg C
Storage Temperature	-30 to +65 deg C
Temperature Coefficient	0.01% per deg C

### ELECTROMAGNETIC COMPATIBILITY

Immunity to :	
Electrostatic discharges:	IEC 61000-4-2-Level III
Radiated radio-Hz fields:	IEC 61000-4-3-Level III
Electrical fast transient/bursts:	IEC 61000-4-4-Level III
Impulse waves:	IEC 61000-4-5-Level III
Conducted disturbances:	IEC 61000-4-6-Level III
Voltage dips & short interruptions:	IEC 61000-4-11

Emissions to:	
Conducted and radiated	CISPR11-Class A

### ENVIRONMENTAL

Working Temperature	0 to +60 deg C
Storage Temperature	-30 to +65 deg C
Temperature Coefficient	0.01% per deg C

### OPTIONS

Solid-state, low voltage relay.	
Rated:	100Vpk, 120mA

### AUXILIARY

Standard:	100-440V AC/100-420V DC
Optional:	19-69V DC

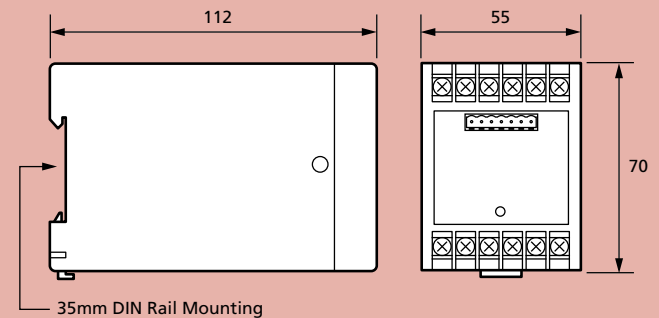
### APPLIED STANDARDS

General	IEC 688 BSEN60688 BS4889 IEC 359
Safety	IEC 6101-1 2010

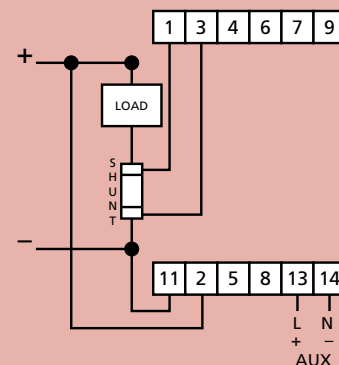
### APPROVALS

UL, C-UL,	Pending
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## DIMENSIONS (mm)



## CONNECTION DIAGRAMS



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