

C-TRAN COMBINED 3 PHASE CT & MULTIFUNCTION TRANSDUCER WITH RS485 OUTPUT

HOBUT

DESCRIPTION

The C-Tran is combined 3 phase multifunction AC Power transducer and 3 phase current transformer. The C-Tran is fully programmable through either of the two communication ports

APPLICATION

The C-Tran can replace traditional multifunction meters and 3 separate current transformers with an all in one combined product with RS485 output



PARAMETERS MEASURED

- Phase Voltage (V)
- Line Voltage (V)
- Phase Current (I)
- Frequency (Hz)
- Active Power Per Phase (W)
- System Active Power (W)
- Reactive Power Per Phase (VAr)
- System Reactive Power (VAr)
- Apparent Power Per Phase (VA)
- System Apparent Power (VA)
- Import Active Power (W.h)
- Import Reactive Power (VAr.h)
- Apparent Energy (VA.h)
- System Power Factor (P.F.)
- Amp Demand (Ad)
- Maximum Amp Demand (Max.Ad)
- Import Watt Demand (Wd)
- Maximum Watt Demand Import (Max.Wd)
- VA Demand (VAd)
- Maximum VA Demand (Max. VAd)
- Neutral Current
- Hours Run—Voltage based

ACCURACY

The accuracy of the C-Tran is Class 0.2 to IEC688 over the range 10% to 120% In, and for voltages from 100V to 120% of nominal input.

For Active and Reactive energy the accuracy is 1% of the reading to IEC 1036.

The accuracy of the current transformer is Class 1 for the range 10% to 120% of nominal input.

MEMORY

All data including energy registers, current and voltage ratios and calibrated data is stored in a non volatile eeprom.

CUMMUNICATION

Port 2:

The main communication port.

It uses the popular Modbus protocol to retrieve measurements and to change the transducers operating parameters. It enables the connection of a host computer, PLC, RTU, Data Logger etc.

Port 1:

This port has a fixed data format, It can also retrieve measurements and set the transducer operating parameters. Only the baud rate and endian format can be changed on this port.

Can connect with M850-LCM display with this port

PROGRAMMING

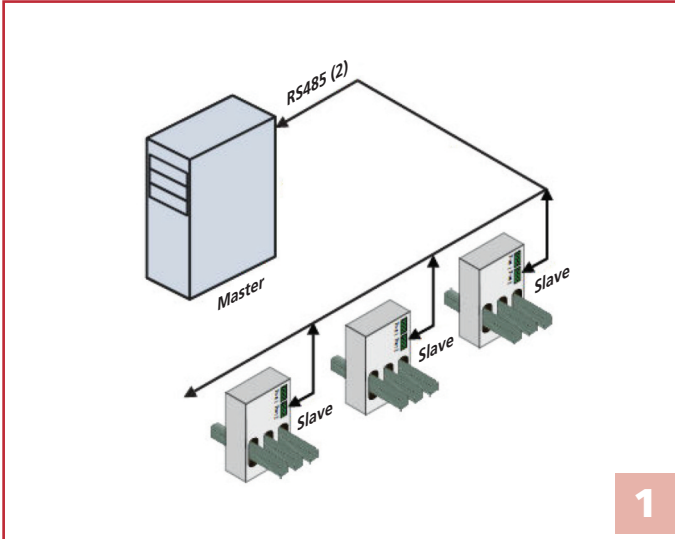
Setup and monitoring software is available from Our website www.hobut.co.uk

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

C-TRAN COMBINED 3 PHASE CT & MULTIFUNCTION TRANSDUCER WITH RS485 OUTPUT

HOBUT

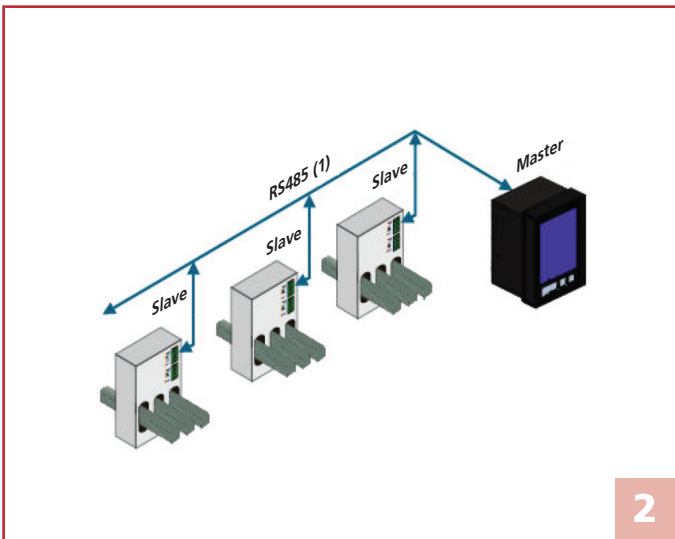
INSTALLATION OPTIONS



1

OPTION 1

Multiple C-Trans can be connected to PC, PLC, RTU, Data Loggers and Scada System with RS485 (Modbus) without the need of a display



2

OPTION 2

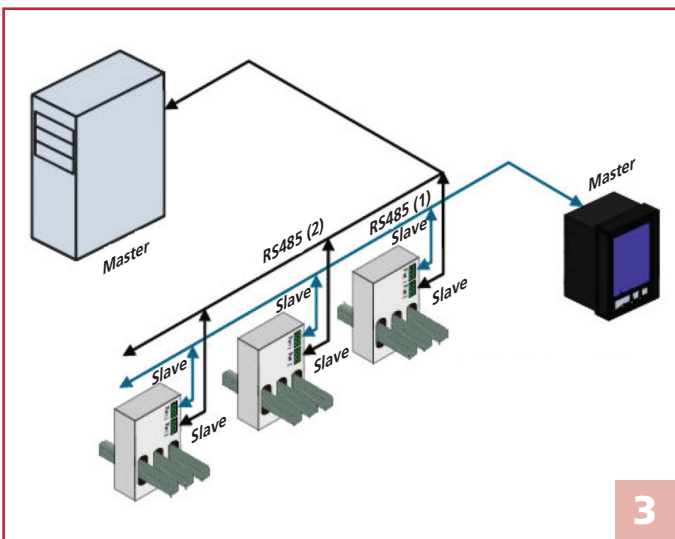
Multiple C-Trans with single display.

Up to 32 C-Trans can be linked together with one single display (Display Part No. M850-LCM)

OPTION 3

Multiple C-Trans with single display.

(As Option 2) with RS485 remote communication (Display Part No. M850-LCM)



3

C-TRAN RANGE

CURRENT	PART NUMBER
60A	C-TRAN-60A
100A	C-TRAN-100A
125A	C-TRAN-125A
150A	C-TRAN-150A
160A	C-TRAN-160A
200A	C-TRAN-200A
250A	C-TRAN-250A

OPTION	PART NUMBER
Remote Display	M850-LCM

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

C-TRAN COMBINED 3 PHASE CT & MULTIFUNCTION TRANSDUCER WITH RS485 OUTPUT

HOBUT

GENERAL SPECIFICATION

INPUT

Rated Un Directly connected Voltages:
 (3ph4W) 100V to 330V L-N Max
 (3ph3W) 100V to 440V L-L Max
 Rated In Depend on CT primary (see options)
 Range 10 to 120% In
 Overload Absolute maximum input: 4 x In
 Frequency 50/60Hz Nominal range 45/65Hz

OPTIONS

3 Phase current available options:
 60A, 100A, 125A, 150A, 160A, 200A & 250A

ACCURACY

Specified @ 23 °C 100V –100%Un, 10%-100% In
 Parameters unless stated Class 0.2 to IEC688
 Frequency Class 0.1Hz to IEC688
 Power Factor Class 0.5 to IEC688
 Active & Reactive Energy 1.0% of reading IEC1036
 Current Transformer Class 1 to IEC 60044-1

INSULATION

Test Voltage 4kV RMS 50Hz for 1 min
 Voltage inputs to case
 3kV RS485 to case and voltage
 Input
 (there is no isolation between
 Port 1 and Port 2)
 Impulse Test EMC 5kV transient complying
 With IEC 801.EN 55020 HF

APPLIED STANDARD

General IEC 688, BSEN 60688
 BS 4889, IEC 359
 Immunity EN 61326-2
 EN 61010—1
 Safety

APPROVALS

UL, C-UL Pending

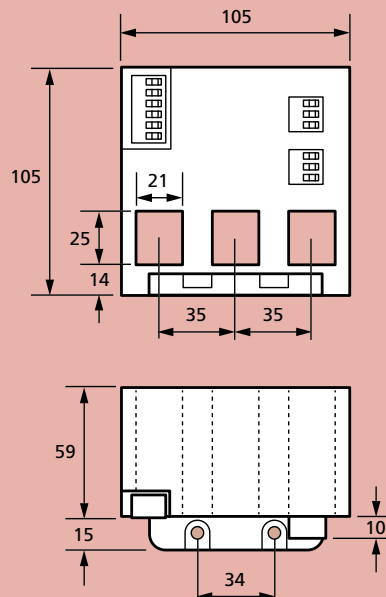
AUXILIARY

Self powered maximum 440V
 Burden <10VA

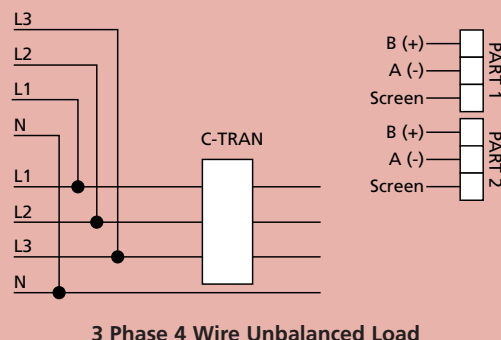
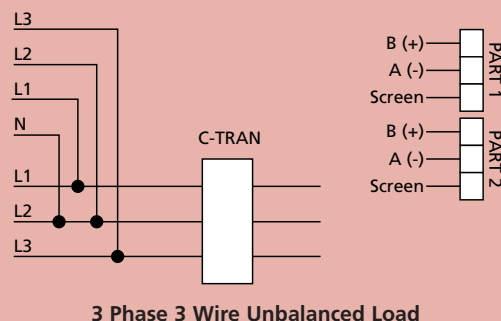
ENVIRONMENTAL

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

DIMENSIONS (mm)



CONNECTION DIAGRAMS



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

HOWARD BUTLER LTD

CROWN WORKS, LINCOLN ROAD
 WALSALL WS1 2EB ENGLAND

Tel: 01922 640003 Fax: 01922 723626
 International Tel: +44 1922 640003 E-mail: sales@hobut.co.uk
<http://www.hobut.co.uk>