

Dorman Smith Loadlimiter 63 Metering and power harnesses







KITS:

Meter/CT harnesses



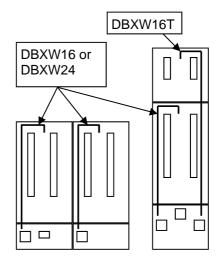
DBXW16 (up to 16 way board)



DBXW24 (20 to 24 way board)



DBXW16T (upto 16 way board)



Power harnesses



DBXWP250 (250A incomer linking to a second distribution board)



DBXWP125 (125A incomer linking to a second distribution board)

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Dorman Smith Loadlimiter 63 Metering and power harnesses

250A incomer

Power harness for connection between two distribution boards - DB1 and DB2

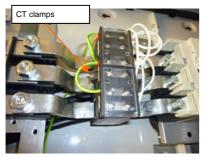


• Fit CTs and DBXWP250 cables to copper connections

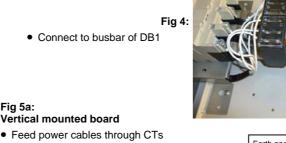


· Route cables up beneath the board DB1





CTs clamped to connections







P1 markings on CTs must face source of supply

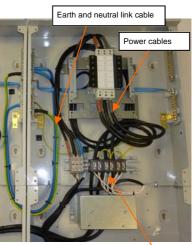
Fig 5a: Vertical mounted board

- of the top DB2
- Connect to either isolator or directly through DBXD0 terminal blocs (excess cable to be coiled)
- Connect neutral and earth between boards

Fig 5b:

Horizontal mounted board

- Route power cables through knockouts into DBMSB, ensure knockout gasket is fitted.
- Feed power cables through CTs of DB2
- · Connect to either isolator or directly through DBXD0 terminal blocs (excess cable to be coiled)
- · Connect neutral and earth be-



P1 markings on CTs must face source of supply

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250A incomer

Meter harness (DB1 board)



Fig 6:

- Connect harness to top of busbar using DBXD0 terminal blocks
- Route harness down side of box to mount fuse carriers on DIN-rail supplied
- Ensure edge gasket is fitted to MCCB mounting plate hole
- Connect CT cables and route under MCCB mounting plate, ready for connection to meter.
- Connect CT earth



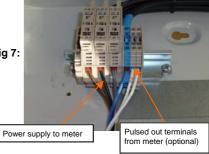
Note:

To use CT wiring harness with individual CT's replace the spade terminals with pin terminals

Numbered cables to correspond with meter ID

Fig 7:

Fuse carrier arrangement



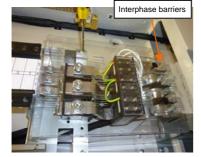


Fig 8:

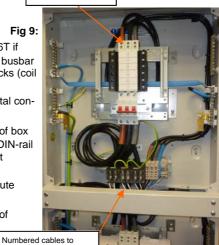
Fit terminal shroud and barriers

Meter harness (DB2 board)

DBXD0 terminal block

Fig 9:

- Connect harness DBWX16T if vertically stacked to top of busbar using DBXD0 terminal blocks (coil if required)
- Refer to Fig.14 for horizontal configuration
- · Route harness down side of box to mount fuse carriers on DIN-rail strips supplied in joining kit DBXJK
- Connect CT cables and route along with meter harness
- Route harness down side of



Meter harness



Fig 10:

- Connect harnesses to meters (Integra 1630 shown)
- Earth bond link to meter panel, supplied in DBXW16 must be connected when meter(s) are fitted

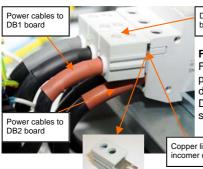
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Dorman Smith Loadlimiter 63 Metering and power harnesses

125A incomer

Power harness for connection between two distribution boards DB1 and DB2



Horizontal mounted board

DBXD0 terminal block

Fig 11:

Fit the two sets of power cables supplied in DBXWP125 to the switch disconnector (longer set) and to the DBXD0 terminal blocks (shorter set) as shown

Copper links supplied with incomer enclosure (DBMSB)

Fig 12a:

Feed DB1 power cables through CTs mounted on board DIN-rail supplied with DBMSB

- Connect to either a second switch disconnector or directly through DBXD0 terminal blocks
- Route DB2 power cable side DB2 board
- Boards to be linked with neutral and earth cables
- Ensure edge gasket supplied is fitted

Earth link cable

2nd switch disconnector or DBXD0 terminal block

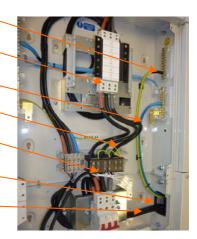
Neutral link cable

DBXWP125 power cables (shorter set)

P1 markings on CTs must face source supply

Edge gasket to be fitted when DB2 mounted to side

DBXWP125 power cables to side DB2 board





Earth link cable

Neutral link cable

DBXWP125 power cables (shorter set)

DBXWP125 power cables (longer set) to top DB2 board

Fig 12b: Vertical mounted board

- Feed DB1 power cables through CTs mounted on board DIN-rail supplied with DBMSB
- Connect to either a second switch disconnector or directly through DBXD0 terminal blocks
- Route DB2 power cable to top DB2 board
- Boards to be linked with neutral and earth cables

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Dorman Smith Loadlimiter 63 Metering and power harnesses

125A incomer

Meter harness (DB1 board and DB2 board)



Fig 13:

- Connect harness DBXW16 or DBXW24 to top of busbar using DBXD0 terminal blocks (coil if required)
- Route harness down the box to mount fuse carriers on DIN-rail supplied with DBMSB
- Connect CT cables and route with meter harness
- Route harness to incomer enclosure for meter connection



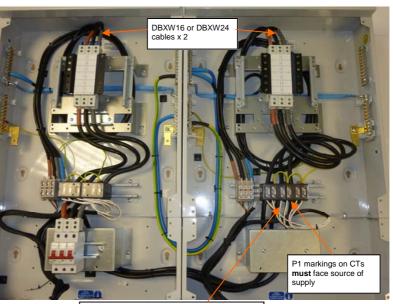
To use CT wiring harness with individual CT's replace the spade terminals with pin terminals

Numbered cables to corresponds with meter ID

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Fig 14: Typical horizontal mounted arrange-

- Connect harness DBXW16 or DBXW24 to top of busbar using DBXD0 terminal blocks (coil if required)
- Route harness down the box to mount fuse carriers on DIN-rail supplied with DBMSB
- Connect CT cables and route with meter harness
- Route harness to incomer enclosure for meter connection



Numbered cables to corresponds with meter ID



Fig 15: Refer to page 6 for meter mounting options (Ci1 & Ci3 meters shown)

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Dorman Smith Loadlimiter 63 Metering and power harnesses Integra Ci3 & Ci1 Digital energy meters

CT connections



Pulsed output modules (optional)

Fig 16:

RS485 output module (optional)

- Connect CT harness as per wiring instructions supplied with respective instrument being fitted
- Earth bond link to meter panel, supplied in DBXW16 must be connected when meter(s) are fitted
- Connect supply conductor, ensuring linking

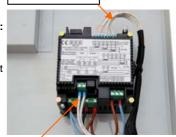
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Fig 17:

Connect CT
harness as per wiring instructions
supplied with respective instrument
being fitted

 Earth bond link to meter panel, supplied in DBXW16 must be connected when meter(s) are fitted

Integra 1630 CT connections



Pulsed output connections (optional)



Fig 18:

 Connect supply conductor, ensuring linking

Refer to installation instruction sheet supplied with meter for set up

Kilowatt hour meter (DIN-rail mounted)

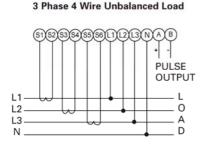
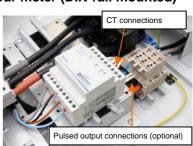


Fig 19: DIN-rail meter mounted on DBXCKR

 Connect CT harness as per wiring instructions supplied with respective instrument being fitted



Refer to installation instruction sheet supplied with meter for set up

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