

## Specification Sheet for Engineered Products

|                  |                           |            |                |
|------------------|---------------------------|------------|----------------|
| Created by/date: | W.LEAH                    | 16/11/2023 | SAP Quote ref: |
| Customer:        |                           |            |                |
| Project          | 400A 4 Way EV Pillar (UK) |            |                |
| Quantity         |                           |            |                |
| Doc Description: |                           |            |                |

### format and ratings

#### unit basics

pattern: feeder pillar  
 product offer: Schneider Electric NS MCCB  
 basis of specification: IEC 61439-7  
 short circuit rating: 36kA as limited by the upstream 400A fuses (incoming switch disconnecter will open in the event a prospective short circuit current up to 36kA rms.)  
 mechanical strength: In accordance with IEC61439-7  
 ambient temperature limits: 35°C Daily average, 40°C maximum  
 fire rating: glow wire test in accordance with IEC61439-7

#### housing

material: fabricated from 2.5mm pre-galvanised mild steel  
 finish: painted, dark grey 632 of BS381C  
 location: outdoor  
 degree of protection: external IP 54, doors open IP XXB of IEC60529 with doors open and all screens in place  
 mounting: ground  
 connection: cable  
 locking: dual padlock, provision only  
 external fixings: stainless steel, backplate secured with button-head screws  
 document pocket: yes, with electric shock warning label  
 plinth covers: yes

#### ratings

phase busbar: 400A  
 neutral busbar: 400A  
 earth bars: 50x3mm  
 busbar material: electro-plated HDHCCu  
 neutral-earth link: neutral earth link within cut-out  
 working voltage: 400V AC, 3 phase, 4 wire, 50Hz  
 earthing system: TT Earthing

### functional devices

#### network operator incoming section

1-off 400A heavy-duty cut-out generally in accordance with SWG-03-029 issue 3 with 400A gU-type fuses fitted  
 incoming cable connection: 1 x UMT300D/MG  
 mechanical connectors per phase and 1 x brass B&H BTCNE connector on neutral  
 cable management: 1 x mild steel split gland plate with 2 x adjustable cable cleats  
 MCCB cable connection: 1 x UMT185/UPN mechanical connectors per phase neutral  
 cable entry: below only

1-off set of 3 x 400/5A 7.5VA class 0.5S metering CTs wired to COP5 meter box with CT test certificates

1-off COP5 meter box complete with metering voltage fuses, 'Wago' test/short circuit terminals and meter wiring

#### incoming switch disconnecter

1 x NSX630NA 4-pole switch disconnecter  
 shunt trip: 230V AC MX opening release coil, operated by voltage supplied RH99P type A earth leakage monitor with CT (50441)  
 Off position only toggle locking device fitted to incoming switch

#### outgoing MCCB (4xTritium RTM75)

4 x NSX160F 4-pole MCCB with Micrologic 5.2E overload and short circuit protection with type B EL protection  
 LV481012 type B CT mounted under outgoing device, wired with LV481018 prewired loom into LV481010 residual current protection relay. Relay to active 240v AC MX coil within outgoing device upon fault detection (supply detailed in ancillaries)  
 cable connection: M8  
 cable management: blank mild steel gland plate  
 cable exit: below only  
 Toggle locking on/off devices fitted to outgoing breakers

### Ancillaries

100W anti-condensation heater circuit with ClimaSys Hygro-thermostat, fed via 6A fuse and ACTI9 ICV40, 1P+N, 6 A, C RCBO from incoming side of switch disconnecter

Aux supply for external street lighting circuit, fed via a 25A fuse and 6A RCBO with an ON/OFF switch mounted on the internal panel door, supply wired to terminals in base of pillar

13A 3-pin switched RCD socket outlet, fed via 16A SP&N STI fuse carrier

X16 240v AC marshalling terminals fed via 25A fuse and ACTI9 ICV40, 1P+N, 6 A, C RCBO to supply MX coil and outgoing device relays (fed from incoming side of switch disconnecter) all to be mounted within instrument compartment.

Emergency stop terminals wired in parallel to MX coil in main incoming breaker. Terminals positioned in bottom RHS of pillar, to be wired to normally open E-stop switch.

#### additional facilities

##### surge protection

type 1&2 surge protection device connected to the main busbars via 100A HRC fuses

### standard items

1 x set of installation and operating instructions

### additional information

GA drawing: EBPEV-DP-UK01-GA  
 Wiring Diagram: EBPEV-DP-UK01-WD

Weight: 390 kgs

#### **Revision History**

Rev0/001 – Issued for review

Rev1/002 – Off position only toggle lock on incomer added – Off/On toggle lock on outgoers added

Rev2-003 – MX coil changed to MN, and E-stop terminals added at customer request

Rev3-004 – Post FAT comments added and revised, includes MN back to MX, incoming UMT style change, Change to street lighting circuit

Rev4-004 – Minor mods

Rev5-005 – Q5+6 updated to RCBOS