

Electric vehicle charging distribution boards

- NCC compliant solutions
- AS/NZS 61439 design verified
- Segregated load management zone
- IP42
- 250A main switch
- Overall energy metering
- 36mm space per charger for metering
- Fully encapsulated busbar
- Optional stop / E-stop
- Load shedding models



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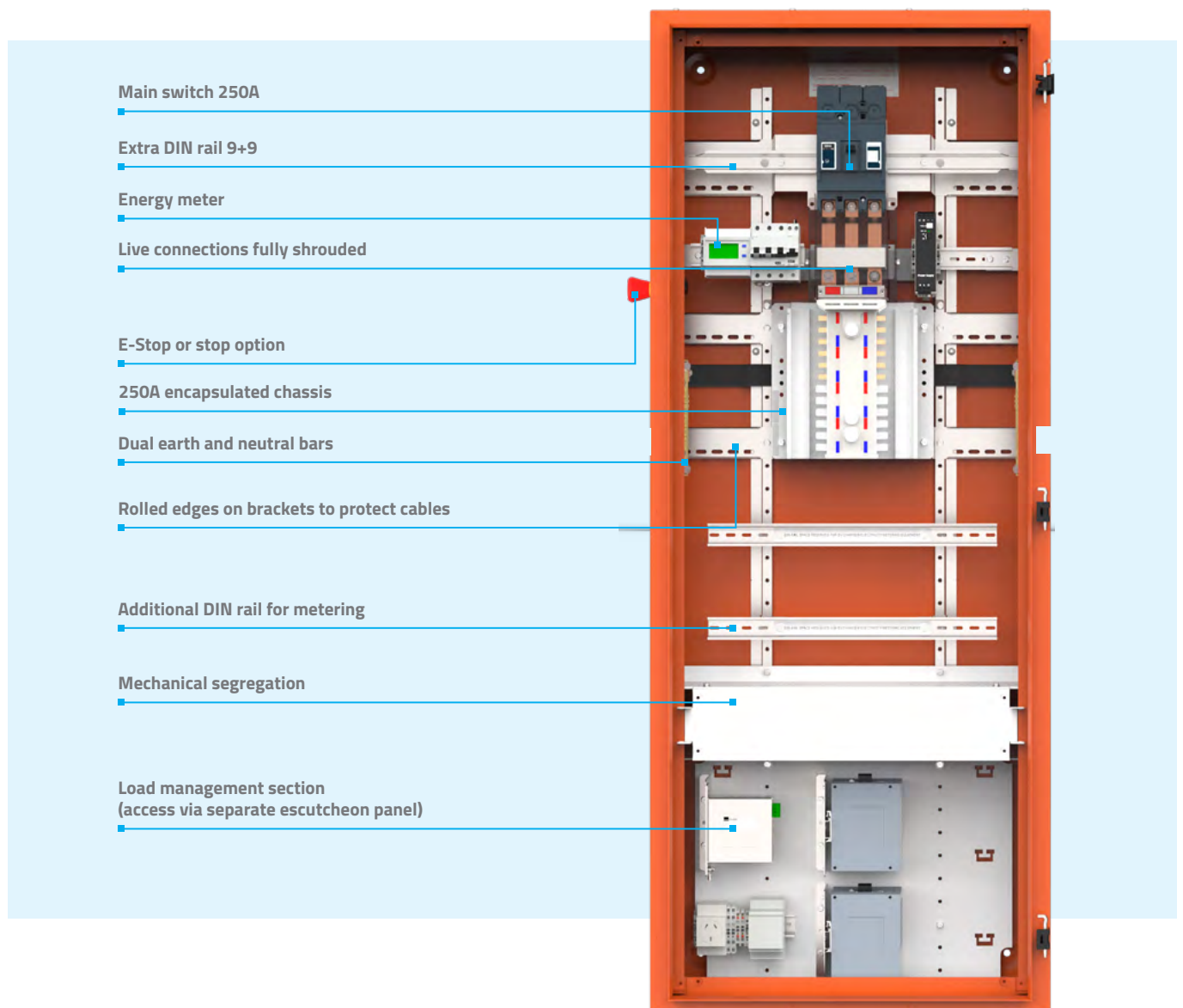
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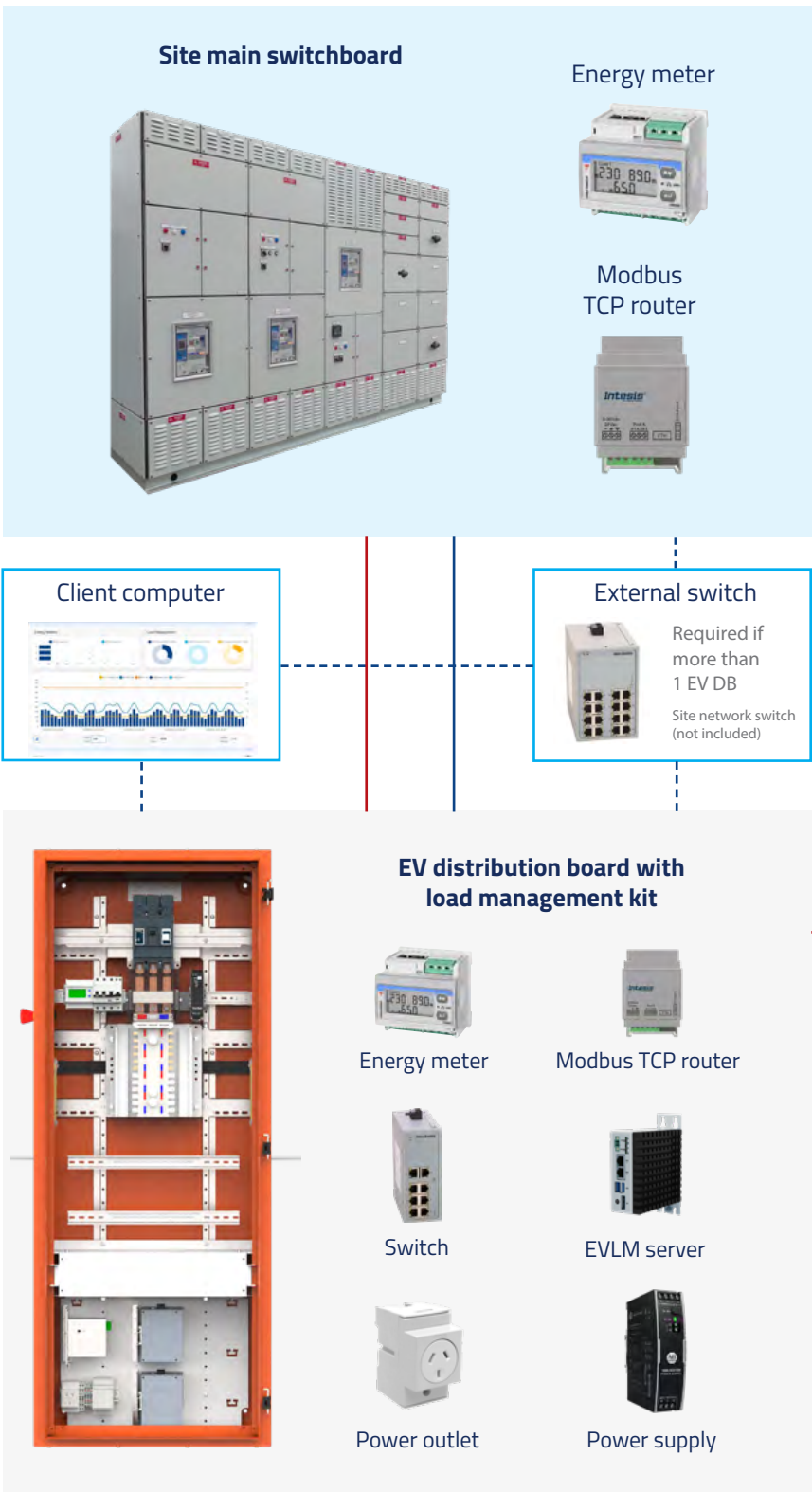
Electric vehicle charging distribution boards

The release of the 2022 version of the National Construction Code introduced a number of provisions in Section J9D4 regarding facilities for electric vehicle charging. Section J9D4 requires many classes of building with associated carparks to have dedicated distribution boards for electric vehicle charging.

NHP can make it easy to comply with the new requirements via a standardised distribution board in the Concept Plus Panelboard range.



EV distribution board architecture



Dynamic load management

- Site energy meter and TCP router
- Additional hardware required if more than 5 EV DBs

Static load management

- No site energy meter
- Each DB set up with static maximum allowable current
- No limit to number of DBs

— Power connections
 — Network connections
 - - - Optional network connections

Delta AC Max EV smart chargers

- 4G / Wi-Fi/ Ethernet
- Single phase wired 7.4kW
- Three phase wired 22kW
- With 5M cable and Type 2 plug
Cat no: EIAWE22KTSE5A04
- Without cable (socket with shutter only)
Cat No: EIAWE22KTSH0A04

Distribution boards

Without control load management zone				
Number of poles	Type charger	Extra DIN rail	Height	Cat no grey*
24 way	1 phase	2 rows x 24	1080mm	CPLMSX24M250G
48 way	Mix 1/3 phase	3 rows x 24	1512mm	CPLMSX48M250G
72 way	3 phase	3 rows x 24	1728mm	CPLMSX72M250G

With single module control load management zone				
Number of poles	Type charger	Extra DIN rail	Height	Cat no grey*
24 way	1 phase	2 rows x 24	1296mm	CPLMSXCS24M250G
48 way	Mix 1/3 phase	3 rows x 24	1728mm	CPLMSXCS48M250G
72 way	3 phase	3 rows x 24	1944mm	CPLMSXCS72M250G

With double module control load management zone				
Number of poles	Type charger	Extra DIN rail	Height	Cat no grey*
24 way	1 phase	2 rows x 24	1512mm	CPLMSXCD24M250G
48 way	Mix 1/3 phase	3 rows x 24	1944mm	CPLMSXCD48M250G

Load shedding without control load management zone 160A (no energy meter)				
Number of poles	Type charger	Extra DIN rail	Height	Cat no grey*
24 way	1 phase	2 rows x 24	1296mm	CPLL24M160G

* Replace G with O for orange distribution panelboard

Emergency stop kits

Description	Cat no.
Stop kit (shunt trip)	CELAEVS
Fail safe emergency stop kit (Under voltage trip)	CELAEVES

EnergySync™ EV Load Management

EnergySync™ EV Load Manager PC & Software Only		
Part Number	Charge Point Capacity	Product Description
EVLM2CP06*	6	EnergySync EVLM2 LOAD MGMT SYS FOR 6 CHARGE POINTS PC ONLY
EVLM2CP12*	12	EnergySync EVLM2 LOAD MGMT SYS FOR 12 CHARGE POINTS PC ONLY
EVLM2CP24*	24	EnergySync EVLM2 LOAD MGMT SYS FOR 24 CHARGE POINTS PC ONLY

* Additional hardware is required to support load management

EnergySync™ EV Load Management Kits			
Allowed Charge Points	Available Ethernet Ports	EVDB Control Zone	Catalogue No
6	4	Single	EVLM2CP06DBA*
12	4	Single	EVLM2CP12DBA*
24	4	Single	EVLM2CP24DBA*
6	12	Double	EVLM2CP06DBB
12	12	Double	EVLM2CP12DBB
24	24	Double	EVLM2CP24DBC

* Additional ethernet switch may be required to connect more charge points



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