● The following diagram shown accessories fully equiped.

Main circuit	Electronic trip relay	Control power circuit / alarm contact	OCR alarm	Electrical operation circuit
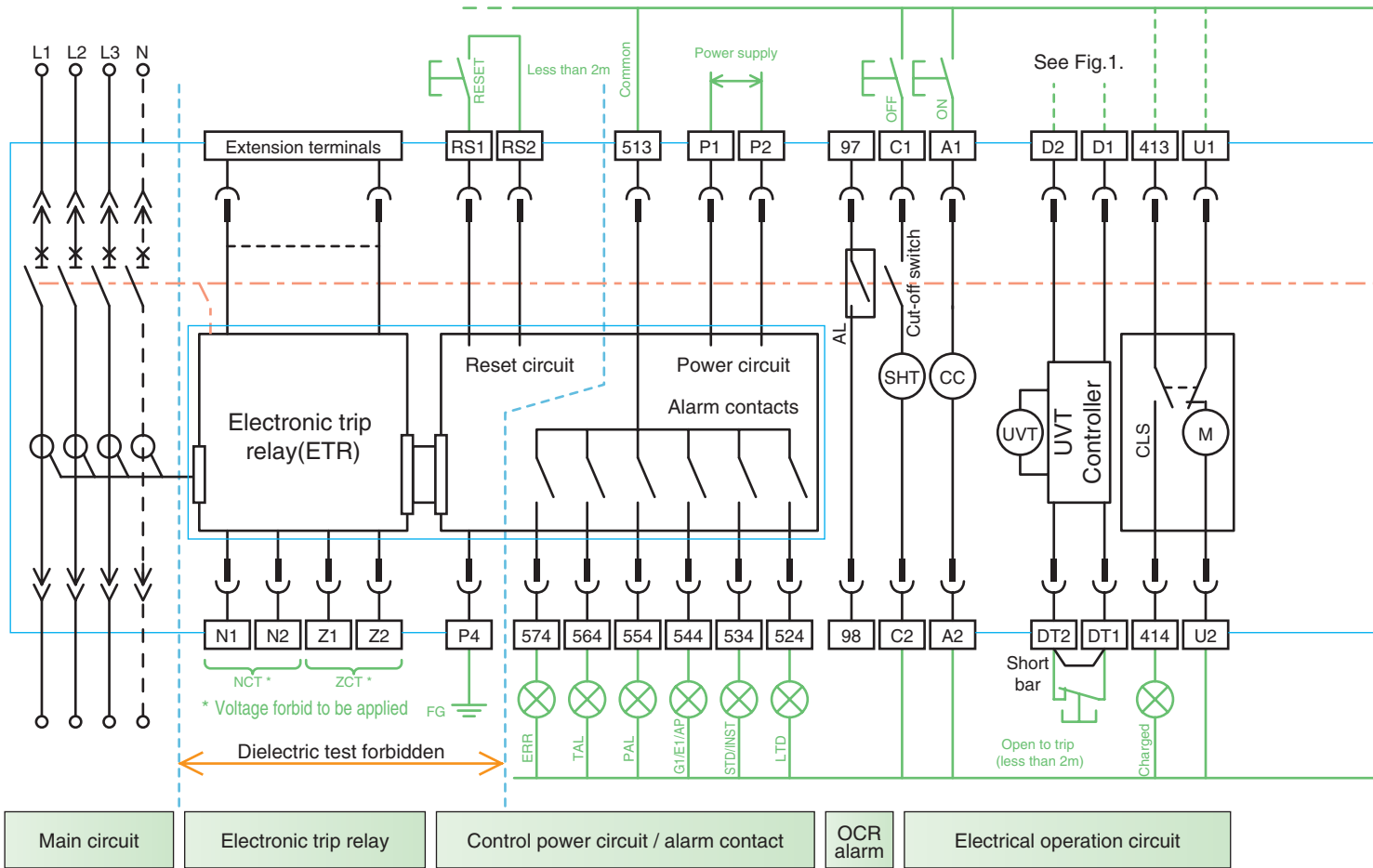
Terminal description

13	14	~	53	54	Auxiliary switch "a"
11	12	~	51	52	Auxiliary switch "b"
U1	U2			Motor charging
413	414			Charged signal
D1	D2			Voltage Input terminal of UVT
DT1	DT2			Trip terminal of UVT (Remote trip)
A1	A2			Closing coil
C1	C2			Shunt trip
97	98			OCR alarm
P1	P2			Power supply for ETR
P4				FG of power supply (FG:Frame Ground)
RS1	RS2			Alarm reset (Trip cause LED, alarm contact)
513	,	524	~	574	Alarm contacts
Z1	Z2			For external ZCT
N1	N2			For Neutral CT (Note)
				For external display DP2
Extension terminals				For Interface unit
				For VT unit

Note; Do not connect the NCT type CW-40LM (for AE-SS series).

Accessory Symbols

SHT	Shunt tripping device
CC	Closing coil
M	Motor(Motor charging device)
UVT	UVT coil
AX	Auxiliary switch
AL	OCR alarm switch
CLS	Charge limit switch
SBC	Shorting b-contact
CL	Cell switch

Internal wiring
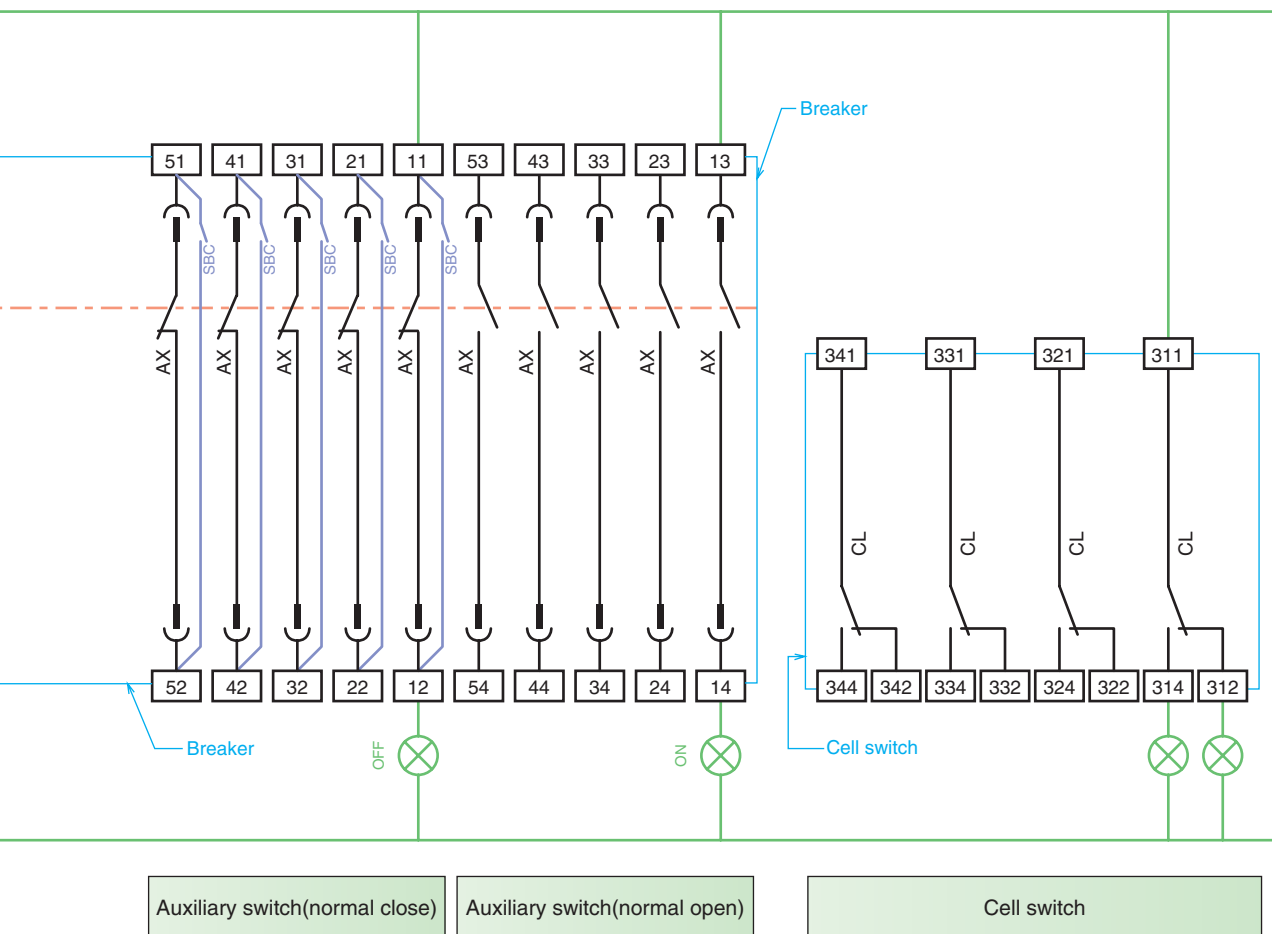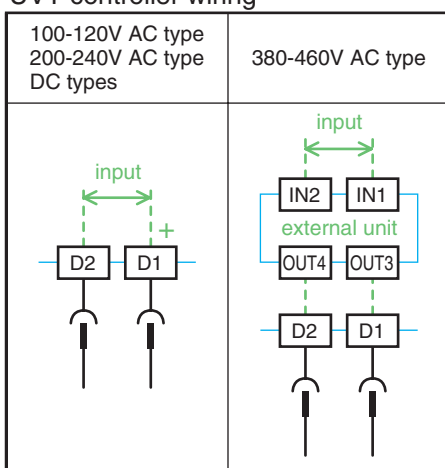External wiring (user's wiring)
Control circuit connecter (drawout type)

Terminals (top row): 51 41 31 21 11 53 43 33 23 13 — Breaker

SBC SBC SBC SBC SBC

AX AX AX AX AX AX AX AX AX AX

Cell switch: 341 331 321 311

CL CL CL CL

Terminals (bottom row): 52 42 32 22 12 54 44 34 24 14

344 342 334 332 324 322 314 312

Breaker

OFF (⊗) ON (⊗) Cell switch (⊗) (⊗)

| Auxiliary switch(normal close) | Auxiliary switch(normal open) | Cell switch |

Fig.1
UVT controller wiring

100-120V AC type 200-240V AC type DC types	380-460V AC type
input D2 D1 (+)	input IN2 IN1 external unit OUT4 OUT3 D2 D1

Note;

● On the drawout type, the cables should have the length which allow the control circuit terminal block to be moved to the left or right by 5mm.

● When a coil load is connected in the same control circuit as the ETR, surge absorbers are required to absorb the surge voltage.

● OCR alarm (AL)

The contact output of the OCR alarm(Standard type AL) is the one-pulse output and the output time is 30~50ms.
For this reason, this output needs self-holding circuit.

● Closing coil (CC)

As CC is one-pulse driven, it is not necessary to insert AXb for burning prevention purposes. Inserting AXb will cause anti-pumping function to be ineffective.

● Under voltage trip device (UVT)

Use the switch that can open and close DC150V, 0.5A to remote trip.
Remote trip terminal has short bar at shipment, so remove it before using this function.
Disconnect the voltage input wires during dielectric testing of main circuit.

● Alarm contacts 513 , 524 ~ 574 are also reset by removing P1 , P2 power supply voltage. (longer than 1sec.)