

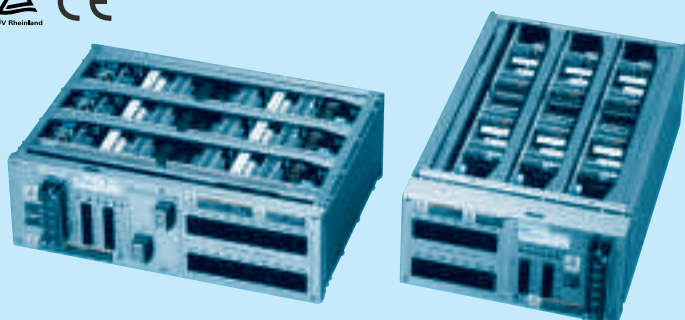
SCHA 10000T/SCDA 10000T

SC H A 10000 T -48 -□

① ② ③ ④ ⑤ ⑥ ⑦



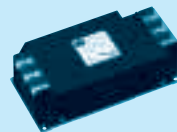
RoHS



SCHA10000T

SCDA10000T

Recommended EMI/EMC
Filter TAC-50-223



- ① Series name
- ② External form
H:Wide front interface
D:Compact front interface
- ③ Single output
- ④ Output wattage
- ⑤ Three-phase input
- ⑥ Output voltage
- ⑦ Optional

SPECIFICATIONS

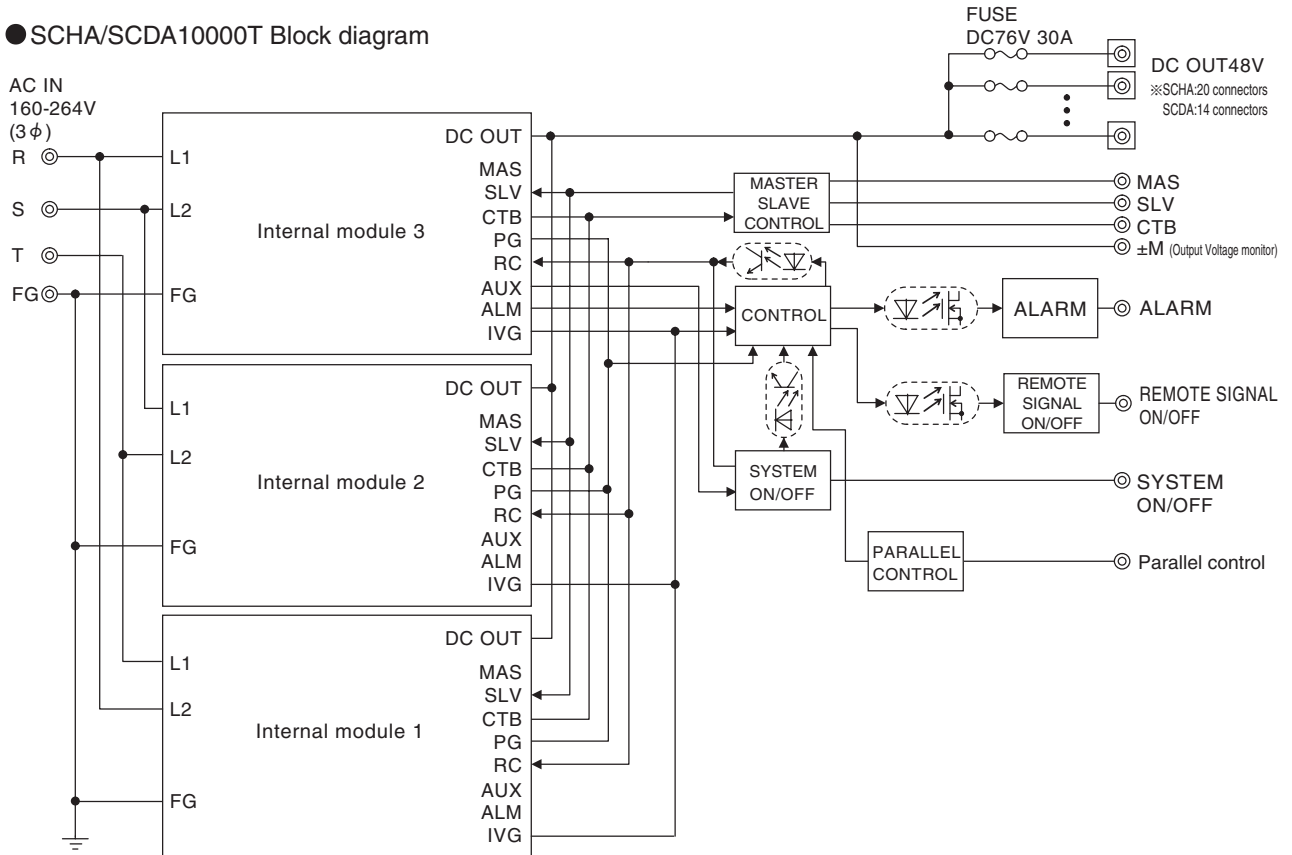
	MODEL	SCHA10000T-48	SCDA10000T-48
INPUT	VOLTAGE[V]	AC160 - 264 3φ	
	CURRENT[A]	ACIN200V	35typ
	FREQUENCY[Hz]	50/60 (47 - 63)	
	EFFICIENCY[%]	ACIN200-240V	90typ
	POWER FACTOR	ACIN200-240V	0.99typ (Io=100%)
	INRUSH CURRENT[A]	ACIN240V*1	60typ / 80typ (Primary inrush current /Secondary inrush current) (More than 3 sec. to re-start)
	LEAKAGE CURRENT[ma]	5.0max (ACIN 240V 60Hz, Io=0 - 100%, According to IEC60950-1)	
OUTPUT	VOLTAGE[V]	48	
	CURRENT[A]	208	
	WATTAGE[W]	9,984	
	LINE REGULATION[mV]	192max	
	LOAD REGULATION[mV]	720max	
	RIPPLE[mVp-p]	0 to +50℃ *2	150max
	RIPPLE NOISE[mVp-p]	0 to +50℃ *2	200max (BW:500MHz)
	TEMPERATURE REGULATION[mV]	0 to +50℃	240max
	DRIFT[mV]	*3	192max
	START-UP TIME[ms]	750max (ACIN 200V, Io=100%)	
	HOLD-UP TIME[ms]	20typ (ACIN200V, Io=100%)	
PROTECTION CIRCUIT AND OTHERS	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	43.2 - 52.8	
	OUTPUT VOLTAGE SETTING[V]	47.0 - 49.0	
	OVERCURRENT PROTECTION	Activate over 105% - 120% of rated current and recovers automatically. (Shut down if low-voltage protection activated)	
	OVERVOLTAGE PROTECTION[V]	*4	56.0 - 59.0 (shut down)
	LOW-VOLTAGE PROTECTION[V]	*4	28.8 - 33.6 (shut down)
	OPERATING INDICATION	LED : Green (48VDC output), White (AC IN)	
ISOLATION	ALARM OUTPUT	Detecting low input voltage, detecting open phase, detecting low output voltage	
	REMOTE ON/OFF (SYSTEM ON/OFF)	Provided	
	(INPUT) - (OUTPUT) - (SYSTEM ON/OFF - REMOTE SIGNAL ON/OFF - ALARM)	AC3,000V 1minute, Cutoff current = 100mA, DC2,200V 1minute, Cutoff current = 1mA (At Room Temperature) DC500V 50MΩ min (At Room Temperature)	
	(INPUT) - (FG)	AC2,000V 1minute, Cutoff current = 100mA, DC2,200V 1minute, Cutoff current = 1mA (At Room Temperature) DC500V 50MΩ min (At Room Temperature)	
	(OUTPUT) - (SYSTEM ON/OFF - REMOTE SIGNAL ON/OFF - ALARM) - (FG)	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)	
ENVIRONMENT	(OUTPUT) - (SYSTEM ON/OFF - REMOTE SIGNAL ON/OFF - ALARM)	AC100V 1minute, Cutoff current = 50mA, DC100V 10MΩ min (At Room Temperature)	
	OPERATING TEMP.,HUMID.AND ALTITUDE	0 to +50℃ , 20 - 85%RH (Non condensing), 3,000m(10,000feet) max (Refer to Cooling method)	
	STORAGE TEMP.,HUMID.AND ALTITUDE	-25 to +85℃ , 20 - 90%RH (Non condensing), 9,000m(30,000feet) max	
	VIBRATION	10 - 55Hz, 19.6m/s ² (2G) , 3minutes period , 30 minutes each along X,Y and Z axis	
SAFETY AND NOISE REGULATIONS	IMPACT	196.1m/s ² (20G), 11ms, once each along X, Y and Z axis	
	AGENCY APPROVALS	UL60950-1, C-UL (CSA60950-1), EN60950-1 complies	
	CONDUCTED NOISE	Complies with EN55011 Group1-A, EN55022-A, CISPR22-A, FCC part15 classA, additional EMI/EMC Filter required for meeting class B	
OTHERS	HARMONIC ATTENUATOR	Complies with IEC61000-3-12	
	CASE SIZE/WEIGHT	*5	459X150X320mm [18.07X5.91X12.6 inches] (W×H×D)/23kg max
	COOLING METHOD	Forced cooling (require external fan)	

*1 The current of input surge to a built-in noise filter (0.2ms or less) is excluded.
*2 Measured by 500MHz oscilloscope.
*3 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25℃ , with the input voltage held constant at the rated input/output.

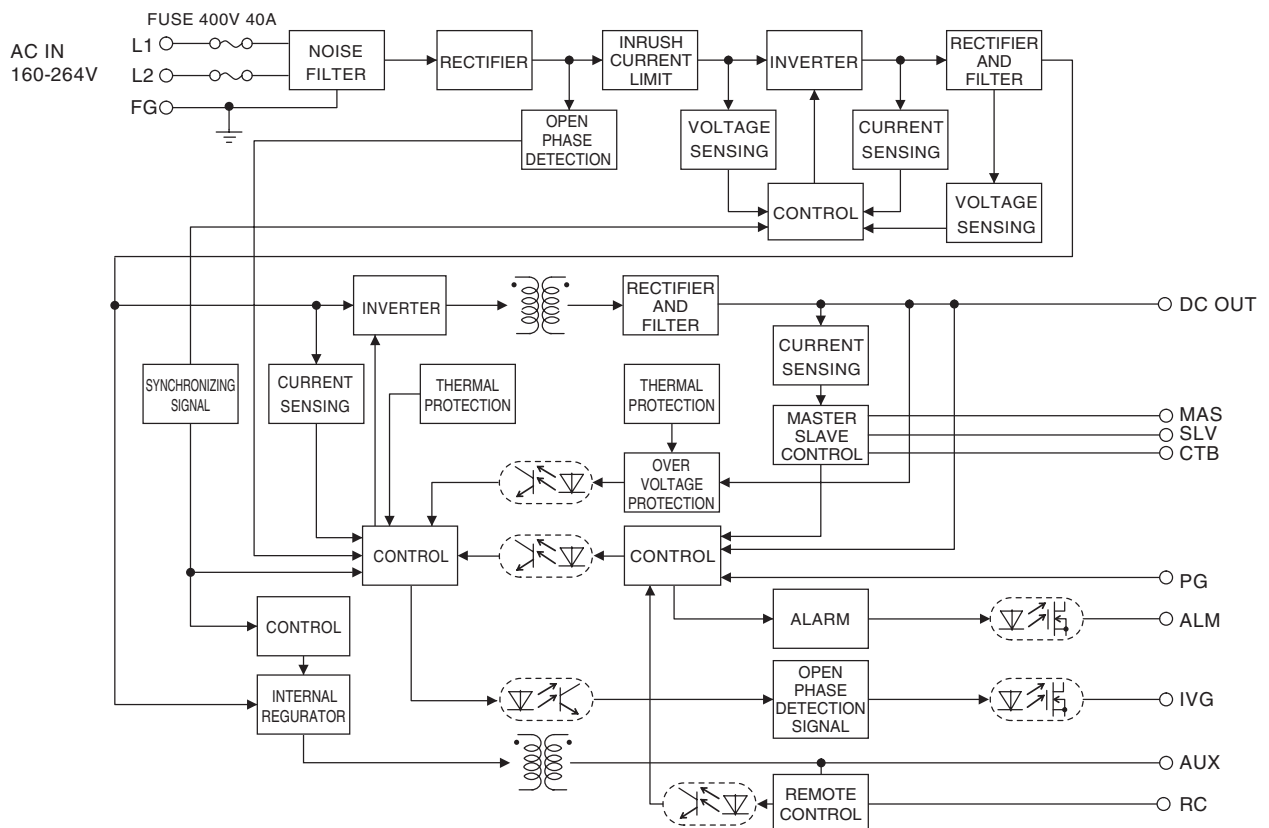
*4 To recover output voltage, recycle input voltage after 3 or more seconds.
*5 Case size contains neither the terminal blocks, connector and screw nor.

SCHA/SCDA10000T Block diagram

● SCHA/SCDA10000T Block diagram



● Internal module Block diagram

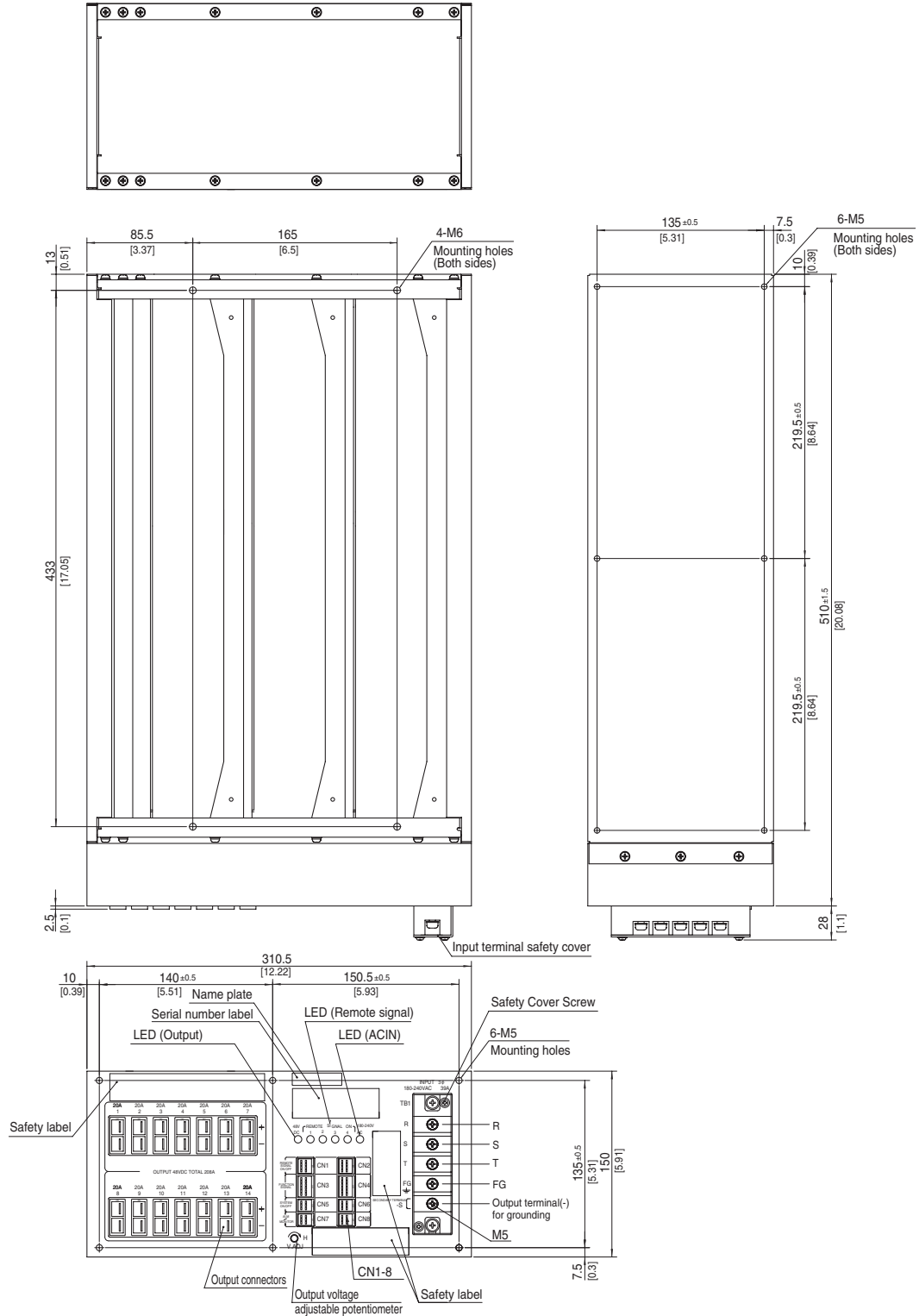


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SCDA10000T external view

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※ Tolerance : ±1 [±0.04]

※ Chassis material : Stainless steel

※ Weight : 20kg max

※ PCB Material/thickness : FR-4 / 1.6mm [0.04]

※ Dimensions in mm, []=inches

※ Screw tightening torque : M5 Mounting Hole 3.0N · m (30.7kgf · cm) max

: M6 Mounting Hole 5.4N · m (55.2kgf · cm) max

: M5 Input terminal 3.0N · m (30.7kgf · cm) max

: M3 Input terminal safety cover 0.6N · m (6.2kgf · cm) max

※ LED (ACIN) : White with AC input

※ LED (Output) : Green with 48VDC output

※ LED (Remote signal) : Green (Indicates Remote signal status)

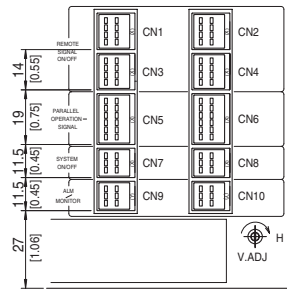
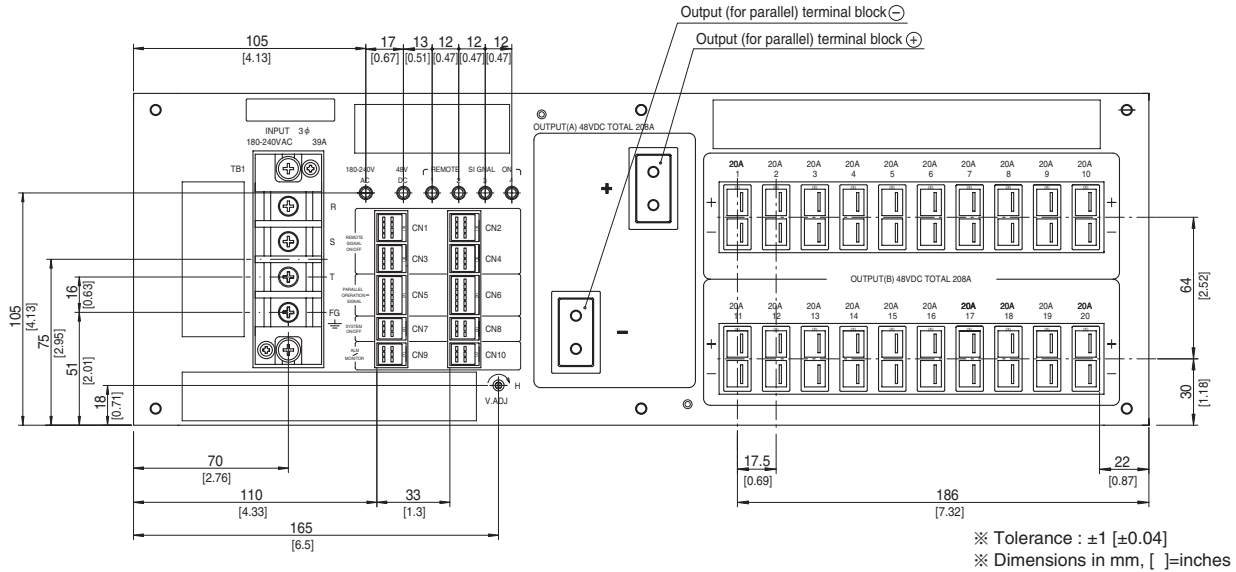
※ Output terminal(-) for grounding

-Output terminal(-) is internally connected to DC48V Output (-).

-Output terminal(-) : For grounding to stabilize secondary output by connecting to system ground (earth).

-Can not draw current through output terminal(-) for grounding.

SCHA10000T external view (front panel)

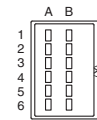


CN1-10 location dimensions

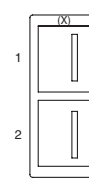
CN1 - 4



CN5 & CN6



Output Connectors



CN7 & CN8



CN9 & CN10



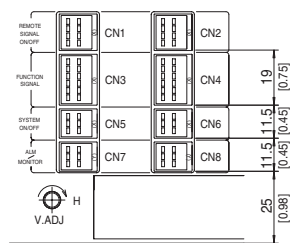
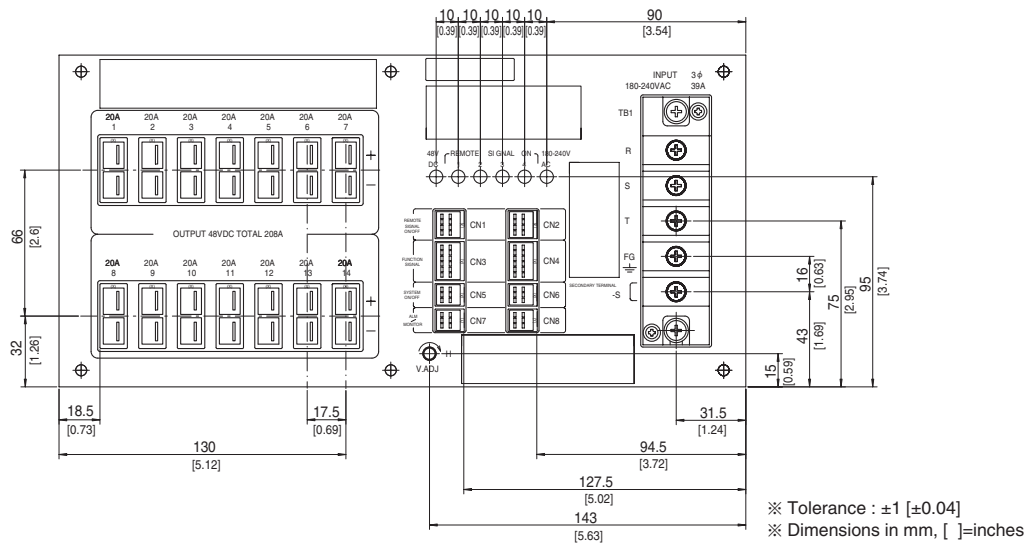
Connector pin numbers

SCHA10000T Functions & Connectors

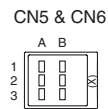
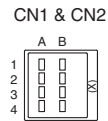
Connector	Housing	Mfr.	Pin No.	Function
Output connector	1-353080-2	1-179958-2	1	Output (+)
			2	Output (-)
CN1-CN4	1318125-1	1-1318119-4	1A	Remote signal ON/OFF 1+
			1B	Remote signal ON/OFF 1-
			2A	Remote signal ON/OFF 2+
			2B	Remote signal ON/OFF 2-
			3A	Remote signal ON/OFF 3+
			3B	Remote signal ON/OFF 3-
			4A	Remote signal ON/OFF 4+
			4B	Remote signal ON/OFF 4-
CN5 & CN6	1318126-1	1-1318118-6	1A,1B	MAS: Master
			2A,2B	SLV: Slave
			3A,3B	CTB: Current balance
			4A,4B	PCNT: Parallel control
			5A,5B	COM:GND
			6A,6B	N.C.
CN7 & CN8	1318124-1	1-1318119-3	1A,1B	System ON/OFF +
			3A,3B	System ON/OFF -
			2A,2B	N.C.
CN9 & CN10	1318124-2	2-1318119-3	1A,1B	Alarm +
			3A,3B	Alarm -
			2A	+M: Output voltage monitor+
			2B	-M: Output voltage monitor-

SCDA10000T external view (front panel)

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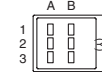
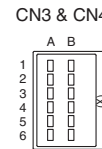


CN1-8 location dimensions



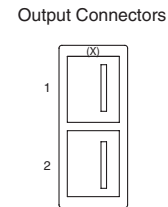
CN1 & CN2

CN5 & CN6



CN3 & CN4

CN7 & CN8



Output Connectors

Connector pin numbers

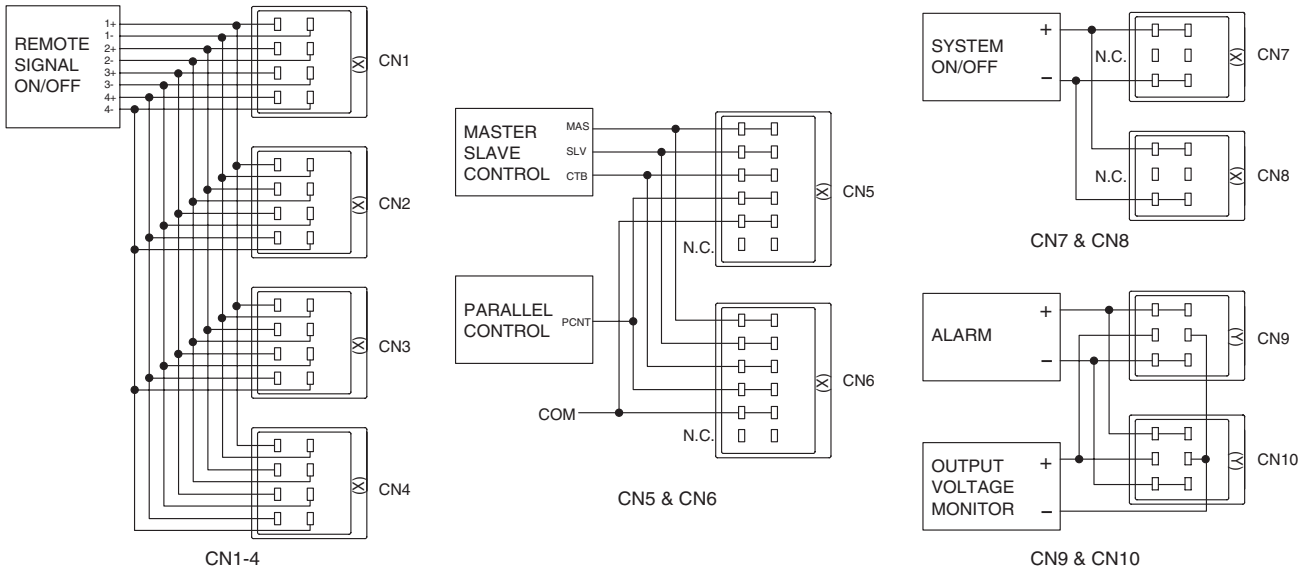
SCDA10000T Functions & Connectors

Connector		Housing	Mfr.	Pin No.	Function
Output connector	1-353080-2	1-179958-2	Tyco Electronics AMP	1	Output (+)
				2	Output (-)
CN1 & CN2	1318125-1	1-1318119-4	Tyco Electronics AMP	1A	Remote signal ON/OFF 1+
				1B	Remote signal ON/OFF 1-
				2A	Remote signal ON/OFF 2+
				2B	Remote signal ON/OFF 2-
				3A	Remote signal ON/OFF 3+
				3B	Remote signal ON/OFF 3-
				4A	Remote signal ON/OFF 4+
				4B	Remote signal ON/OFF 4-
CN3 & CN4	1318126-1	1-1318118-6	Tyco Electronics AMP	1A,1B	MAS: Master
				2A,2B	SLV: Slave
				3A,3B	CTB: Current balance
				4A,4B	PCNT: Parallel control
				5A,5B	COM:GND
				6A,6B	N.C.
CN5 & CN6	1318124-1	1-1318119-3	Tyco Electronics AMP	1A,1B	System ON/OFF +
				3A,3B	System ON/OFF -
				2A,2B	N.C.
CN7 & CN8	1318124-2	2-1318119-3	Tyco Electronics AMP	1A,1B	Alarm +
				3A,3B	Alarm -
				2A	+M: Output voltage monitor+
				2B	-M: Output voltage monitor-

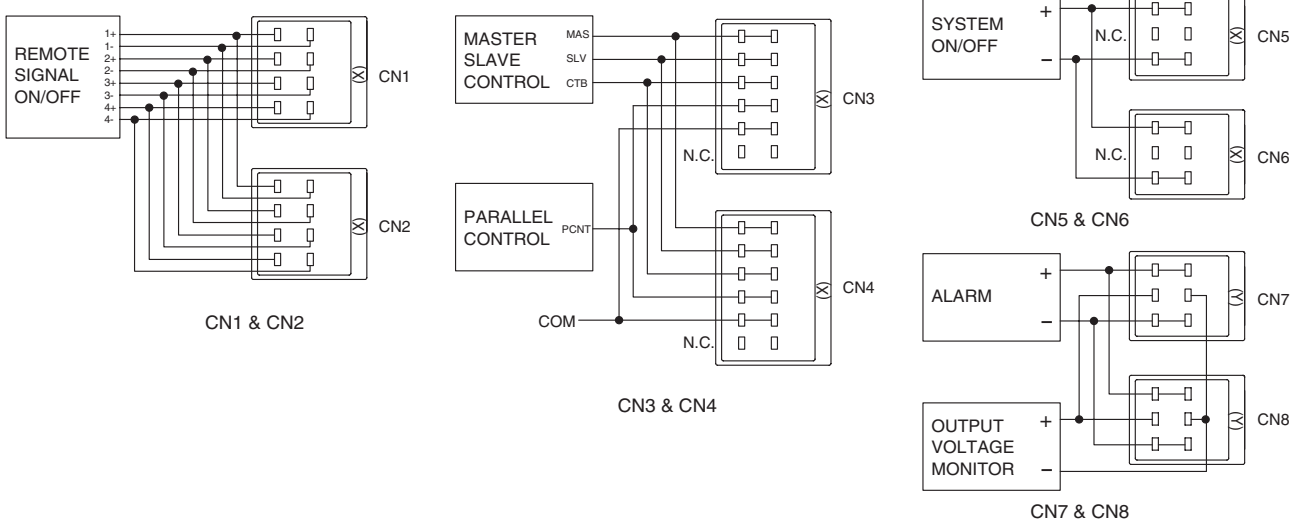
Connection diagram of function connectors

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● SCHA10000T



● SCDA10000T



Basic characteristics data

Model	Circuit method	Switching frequency [kHz]	Input current [A]	Rated input fuse	Inrush current protection circuit	PCB/Pattern		
						Material	Single sided	Double sided
SCHA 10000T	Active filter	65	35	400V 40A	SCR	FR-4		Double and Multi
	Forward converter	130						
SCDA 10000T	Active filter	65	35	400V 40A	SCR	FR-4		Double and Multi
	Forward converter	130						

* The value of input current is at ACIN 200V 3 φ and rated load.