

WIRING DIAGRAM MURAL AIR HANDLING UNITS



This wiring diagram is only an addition to our installation and operation manuals, available on our website for download.



All internal components (fans, controls, sensors, actuators...) to the control board are pre-wired.
The power supply must be connected to the safety isolating switch by a qualified electrician. Earthing is obligatory.



All electrical connections must be made by a qualified electrician and in accordance with local rules and regulations.



Residual current circuit breaker
300mA class B or B+



Fuse protection (D-type, "slow")
D – 10.000 A – AC3

Changes

Name	Date	Draw.:	Name	Date
		check.:	M.Sgreccia	11/06/2019
		Norm:	G.Beckers	
Subject:	MURAL_Wiring TAC5 V3.spl7			

Application:
General

Page

1

of

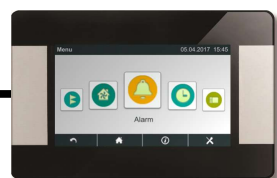
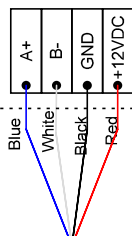
19

MURAL PX (TOP)

Rx Tx
LED LED



300mA B-Type
Residual current
circuit breaker



The cables used in the network must comply to the RS-485 standard with twisted pair conductors. The cables must be shielded. Conductor Area $>0.2 \text{ mm}^2$. The total length must not exceed 100 meters.

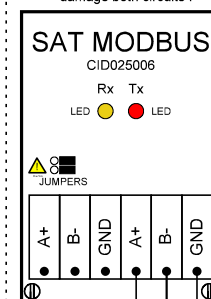
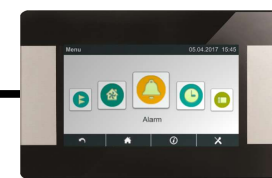
MURAL P300/400T



The SAT circuits must be plugged in correctly before the main circuit is powered. Wrong positioning can damage both circuits.

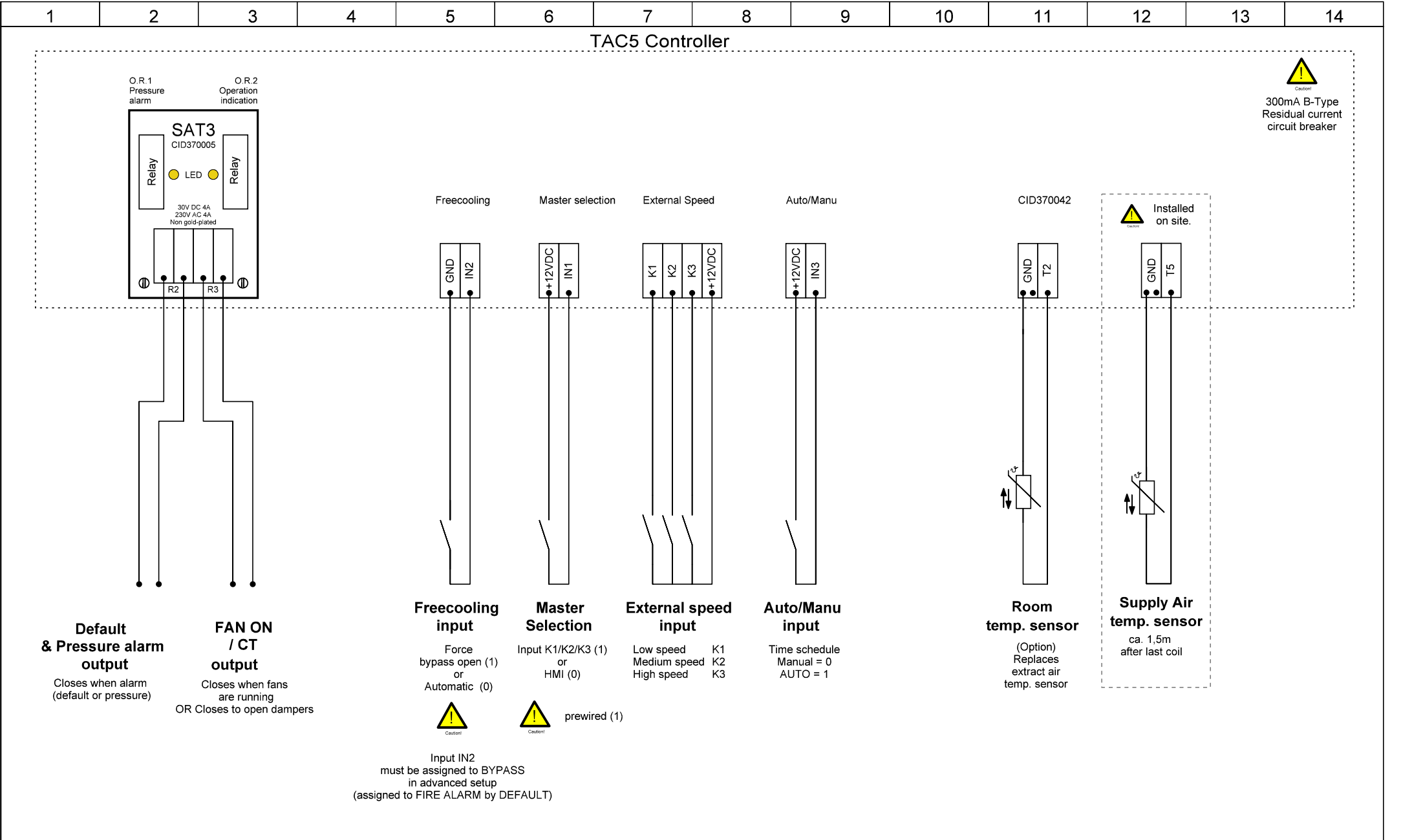


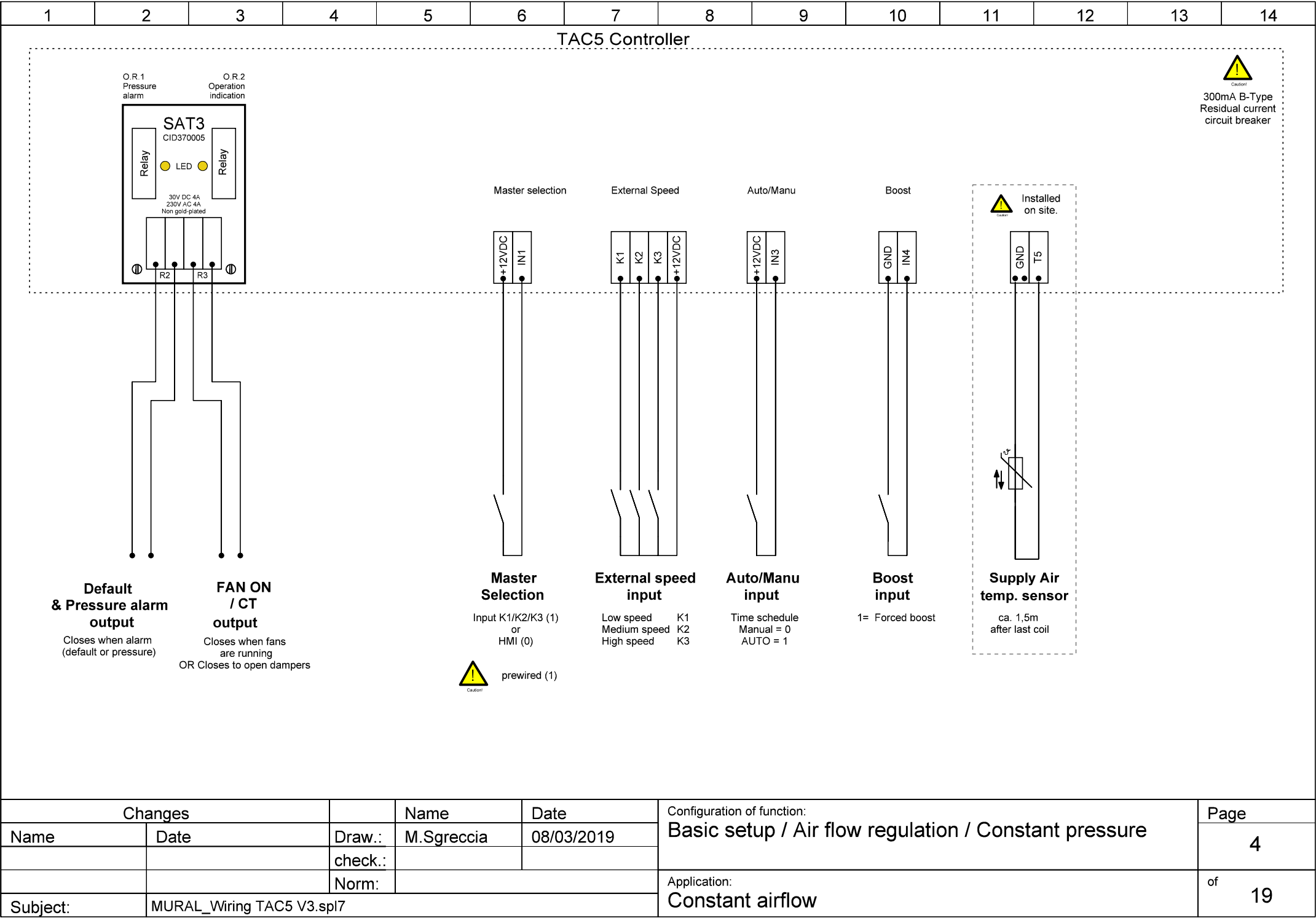
300mA B-Type
Residual current
circuit breaker

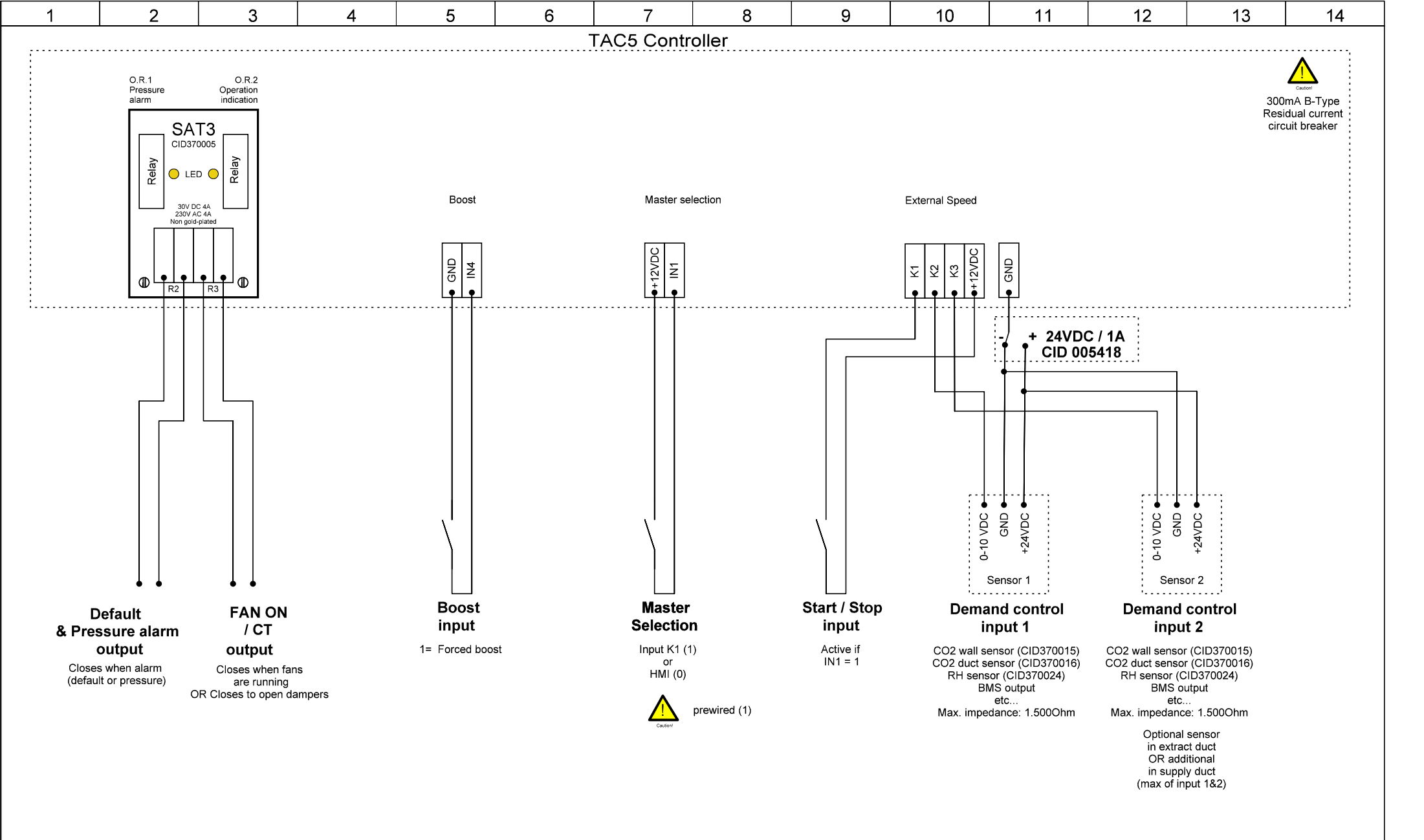
Modbus RTU
RS485

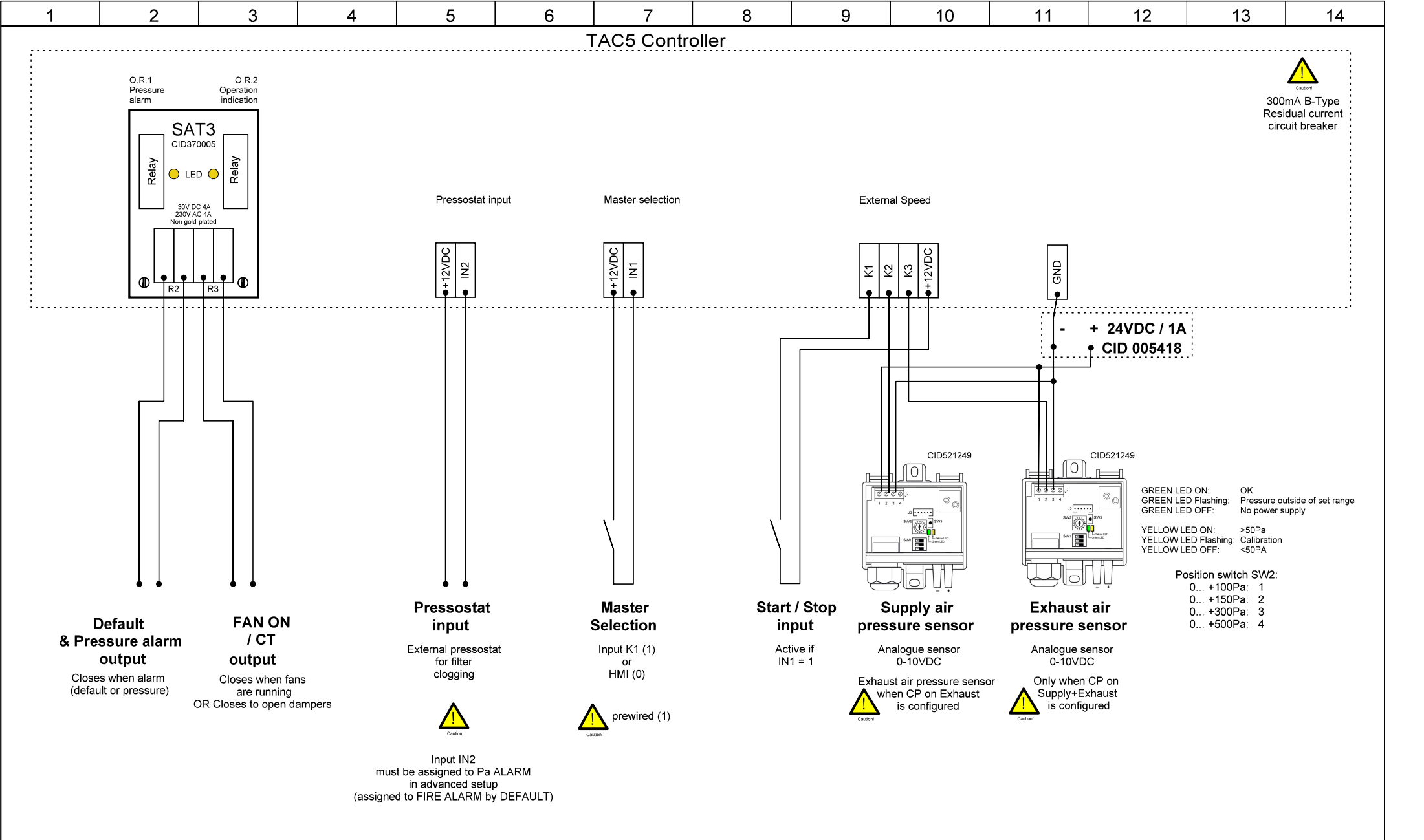
The cables used in the network must comply to the RS-485 standard with twisted pair conductors. The cables must be shielded. Conductor Area $>0.2 \text{ mm}^2$. The total length must not exceed 100 meters.

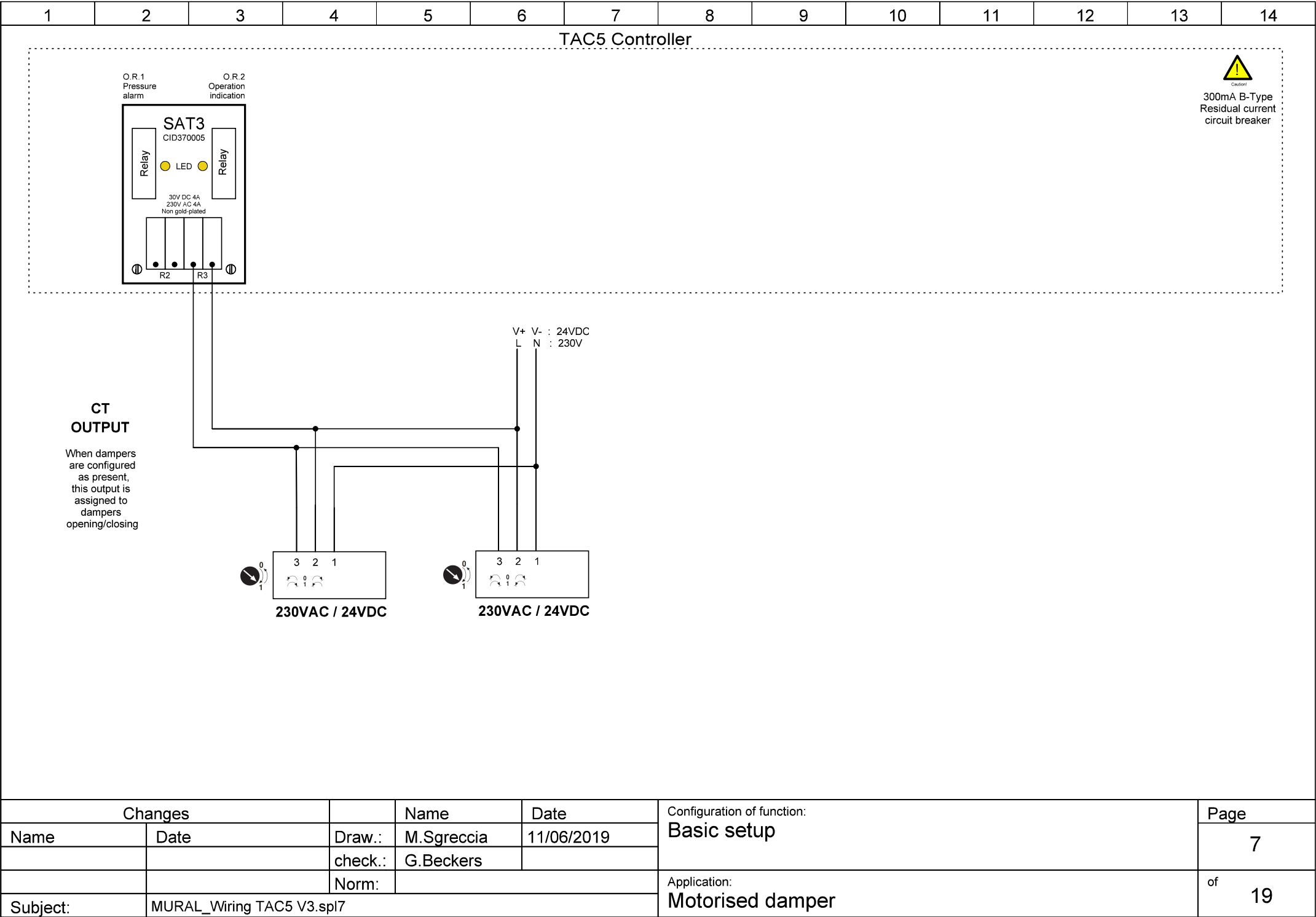
Changes			Name	Date		Page
Name	Date	Draw.:	M.Sgreccia	11/06/2019		2
		check.:	G.Beckers			
		Norm:				
Subject:	MURAL_Wiring TAC5 V3.sp17				Application: TACtouch	of 19

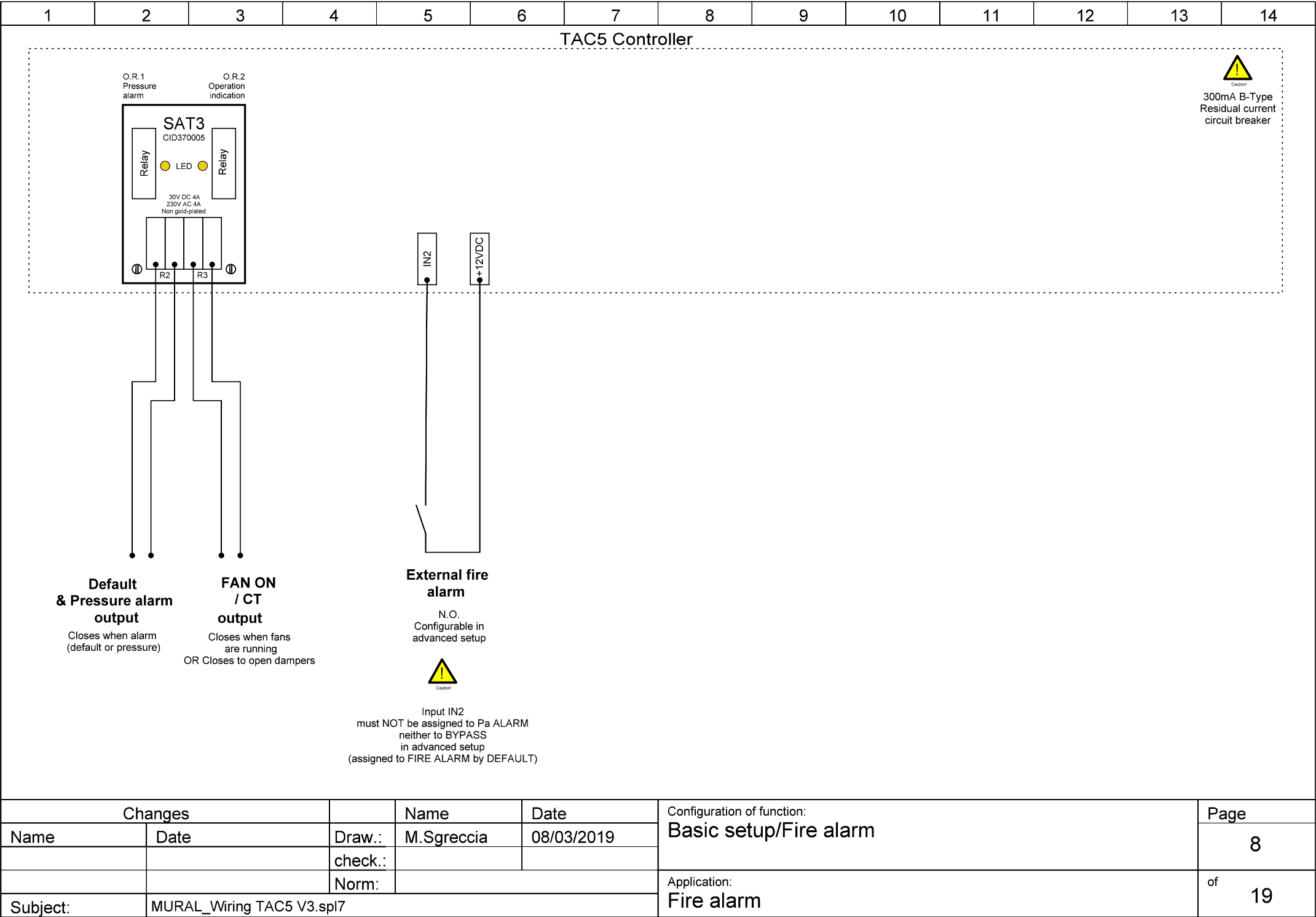




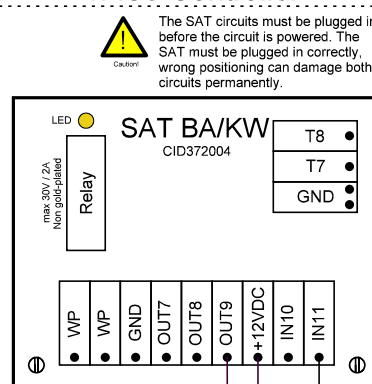




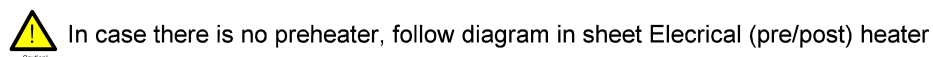




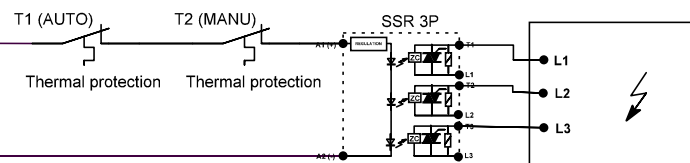
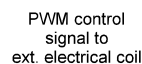
TAC5 Controller



300mA B-Type
Residual current
circuit breaker



1=Heating OFF
0=Heating ON



KWout

KWout
(postheater)

SSR (solid state relay) and coil are
2P monophase for MURAL
size under 1200

Changes			Name	Date	Configuration of function: Advanced setup / External coils / Electric (PWM)	Page
Name	Date	Draw.:	M.Sgreccia	08/03/2019		10
		check.:			Application: External elec. postheating	of 19
		Norm:				
Subject:	MURAL_Wiring TAC5 V3.sp17					

The diagram illustrates the SAT BA/KW module, a non-gold-plated relay. It features a 11-pin header and a 3-pin terminal block. The pin header labels from left to right are: WP, WP, GND, OUT7, OUT8, OUT9, +12VDC, IN10, and IN11. The terminal block labels from top to bottom are: T8, T7, and GND. A yellow LED is connected to the first WP pin and the T8 terminal. A caution symbol is present, indicating that the SAT circuits must be plugged in before the circuit is powered, as incorrect wiring can permanently damage the circuits.

WP
Cooling
demand

LED

max. 30V / 2A
Non gold-plated

Relay

SAT BA/KW
CID372004

T8
T7
GND

WP WP GND OUT7 OUT8 OUT9 +12VDC IN10 IN11

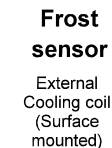
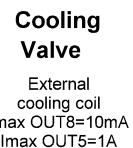
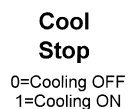
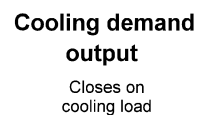
WP
Cooling
demand



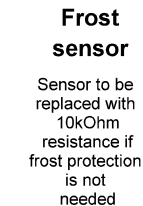
The SAT circuits must be plugged in before the circuit is powered. The SAT must be plugged in correctly, wrong positioning can damage both circuits permanently.



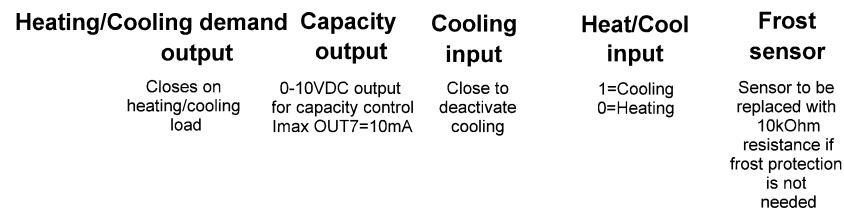
300mA B-Type
Residual current
circuit breaker



Changes			Name	Date	Configuration of function: Advanced setup / External coils / Cooling	Page
Name	Date	Draw.:	M.Sgreccia	08/03/2019		12
		check.:				
		Norm:			Application: External cooling coil	of 19
Subject:	MURAL_Wiring TAC5 V3.sp17					



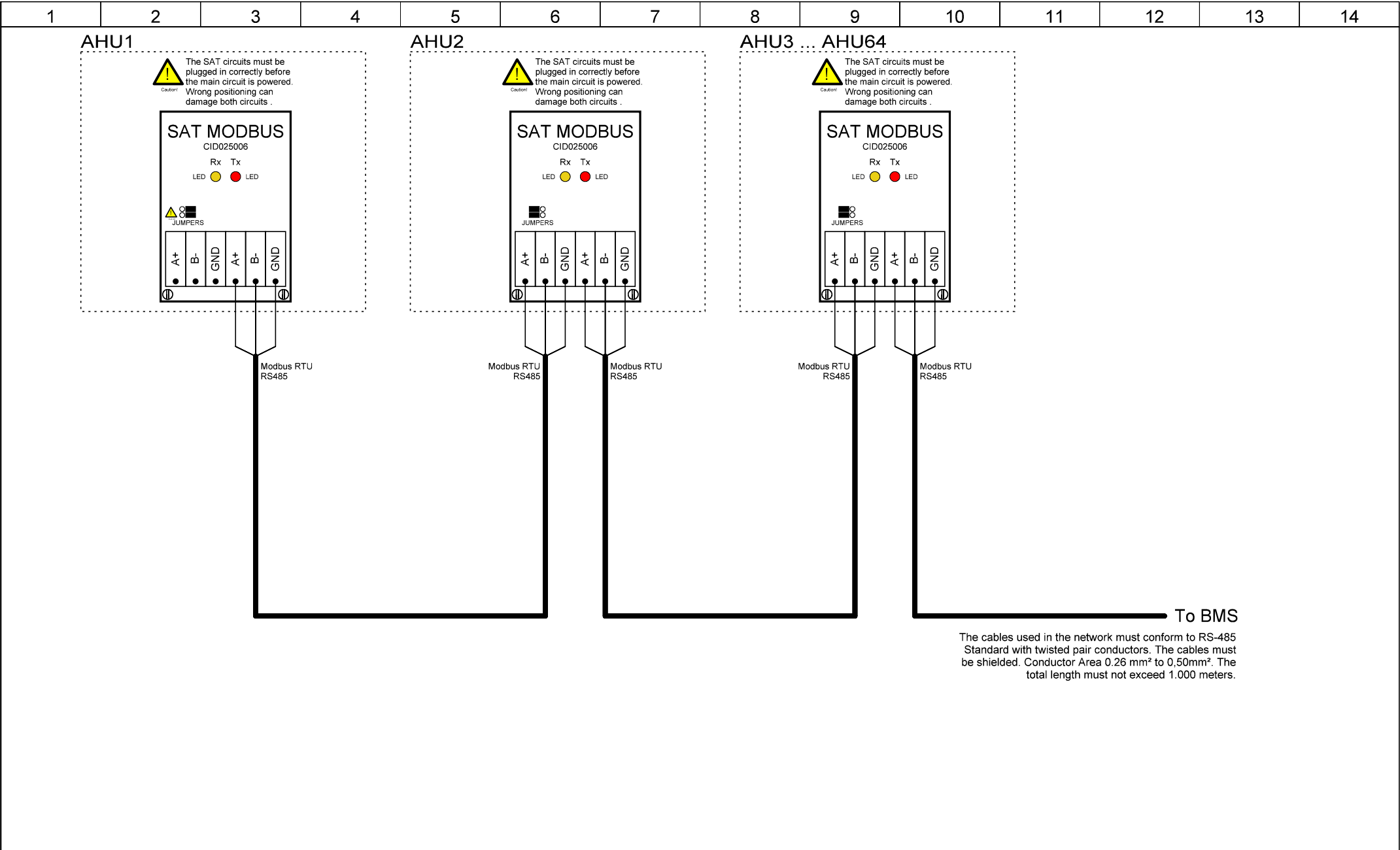
Changes			Name	Date	Configuration of function: Advanced setup / External coils / Reversible	Page
Name	Date	Draw.:	M.Sgreccia	08/03/2019		13
		check.:				
		Norm:			Application: Change over / Master	of 19
Subject:	MURAL_Wiring TAC5 V3.sp17					



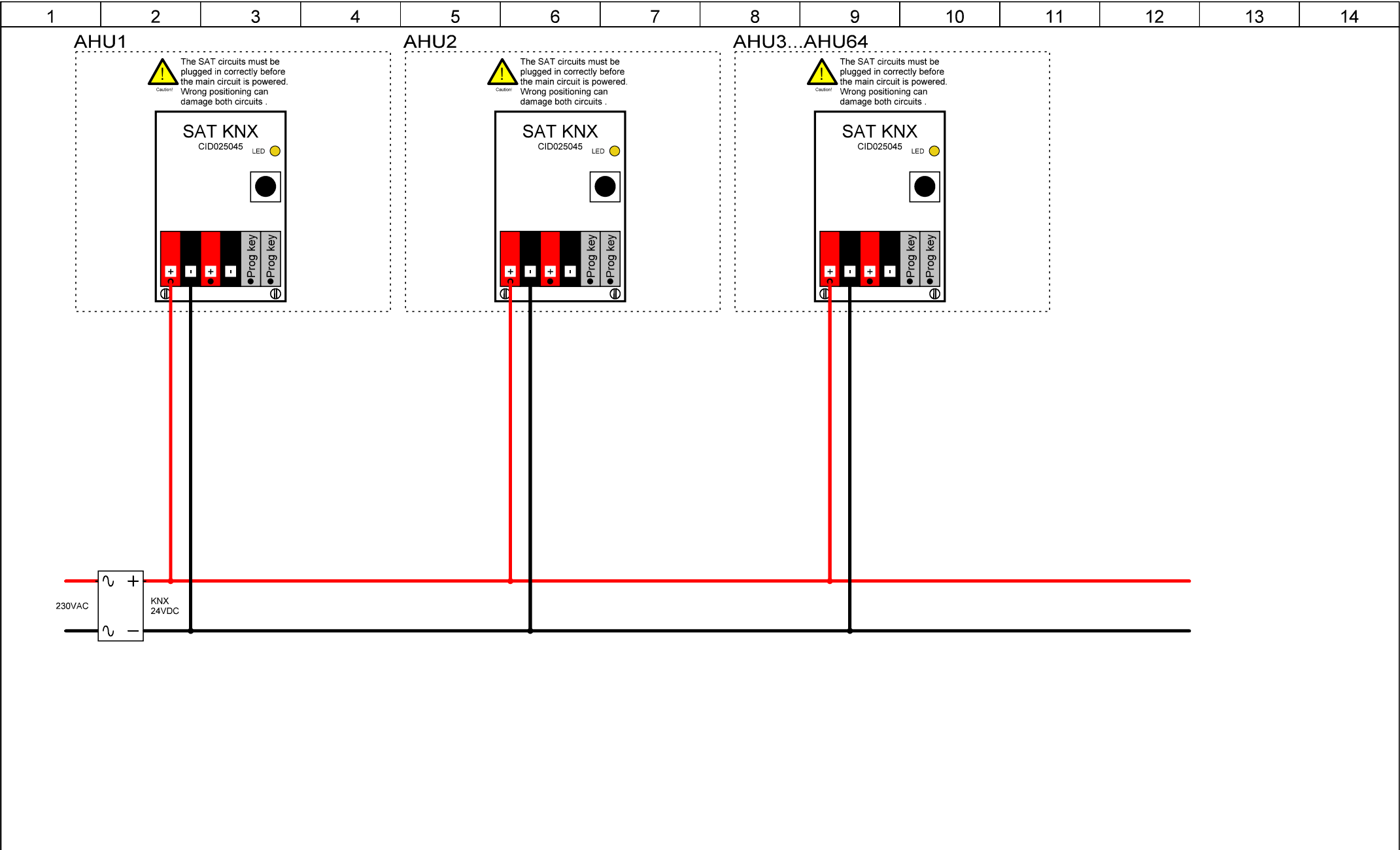
Changes			Name	Date	Configuration of function: Advanced setup / External coils / Reversible	Page
Name	Date	Draw.:	M.Sgreccia	08/03/2019		14
		check.:				
		Norm:			Application: Change over / Slave	of 19
Subject:	MURAL_Wiring TAC5 V3.sp17					

300mA B-Type
Residual current
circuit breaker

MURAL_Wiring TAC5 V3.spl7



Changes			Name	Date	Configuration of function: Advanced setup	Page
Name	Date	Draw.:	M.Sgreccia	08/03/2019		16
		check.:				
		Norm:			Application: Modbus RTU	of 19
Subject:	MURAL_Wiring TAC5 V3.spl7					





Changes			Name	Date	Configuration of function: Settings Menu/ TACtouch setup/TACtouch master Network menu	Page
Name	Date	Draw.:	M.Sgreccia	08/03/2019		19
		check.:				
		Norm:			Application: TACtouch centralised	of 19
Subject:	MURAL_Wiring TAC5 V3.spl7					