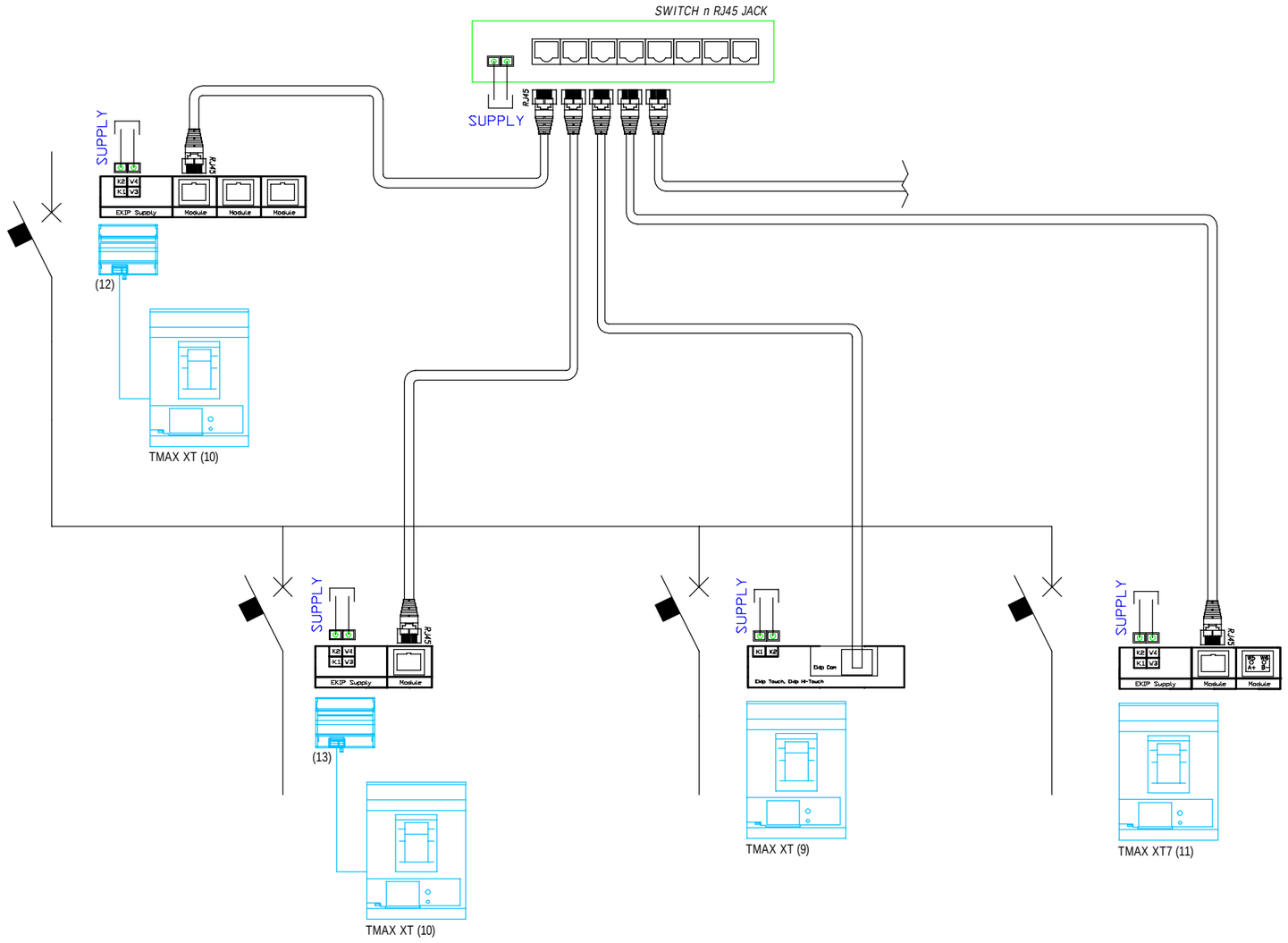

Ekip Supply Module		
Supply	Ekip Supply DC	Ekip Supply DC/AC
Primary Voltage	24 - 48 V DC	110-240 V AC/DC
Voltage range	21,5 - 53 V DC	105-265 V AC/DC
Frequency range	-	45-66 Hz
Nominal power	10 W max	10 VA/W max

Communication System Interface

Table 1 - Communication parameters

Protocol	Modbus TCP with 502 communication port
Baud Rate	10 - 100 Mbps
Ethernet port	Female connector RJ45 (W9)

Table 2 - Communication module default parameters

Parameter	Default
Function	Modbus TCP
Force Static IP Address Modbus TCP	OFF
Static IP Address Modbus TCP	0.0.0.0
Static IP Address Modbus TCP Redundant	0.0.0.0
Static Network Mask	0.0.0.0
Static Gateway Address	0.0.0.0
TCP Client	IP address of connected clients
MAC Address	Address assigned by ABB - OUI ac:d3:64

NOTES:
1) Cat6 S / FTP Ethernet cable is recommended.
2) The devices must be connected to an Ethernet cable via the RJ45 female port (W9) of the Ekip Modbus TCP Module.
3) It is necessary to use unmanaged Ethernet Switch 10/100 MBit / s with a sufficient number of ports for the connection of all the devices using Ekip Com Modbus TCP. The choice and installation of the Ethernet Switch is the responsibility of the customer.
4) The maximum length of the Ehternet cable from the Ekip Com Modbus module to the Ehternet Switch device is 100 m (Ethernet Cat6 S / FTP cable)
5) Devices connected to the same Modbus TCP network must have different IP addresses, the use of static IP addresses is recommended. To assign static IP addresses, set the "Force Static IP Address" field in the menu of the Ekip Com Modubs TCP module.
6) It is possible to configure the Ekip Com Modbus TCP modules in one of the ways:
- directly via the release display (XT5, XT7)
- With a device connected to a computer through an Ekip Programming Unit or Ekip T&P unit and with Ekip Connect software.
- With device connected via bluetooth with Smartphone or tablet with EPiC application.
For configuration of Ekip Com Modbus TCP devices see table 1.
7) Devices equipped with Ekip Com Modbus TCP can be connected with a maximum of 3 CLIENTS simultaneously.
8) For more details www.modbus.org

(9) Tmax XT2, XT4 in the configuration with Ekip Touch or Touch Measuring or Ekip Hi-Touch or Ekip M Touch + Ekip COM Modbus TCP (internal module).
Breakers with internal communication module are supplied from factories with 1 meter Ethernet cable connected to the trip unit.

Tmax XT5 in the configuration with Ekip Touch or Touch Measuring or Ekip Hi-Touch or Ekip M Touch or Ekip G Touch or Ekip G Hi-Touch + Ekip COM Modbus TCP (internal module)

(10) Tmax XT2, XT4 in the configuration with Ekip Touch or Touch Measuring or Ekip Hi-Touch or Ekip M Touch + Ekip Cartridge + Ekip Supply + Ekip Com Modbus TCP

Tmax XT5 in the configuration with Ekip Touch or Touch Measuring or Ekip Hi-Touch or Ekip M Touch or Ekip G Touch or Ekip G Hi-Touch + Ekip Cartridge + Ekip Supply + Ekip Com Modbus TCP

(11) Tmax XT7 in the configuration with Ekip Touch or Touch Measuring or Ekip Hi-Touch or Ekip M Touch or Ekip G Touch or Ekip G Hi-Touch + Ekip Supply + Ekip Com Modbus TCP

(12) Ekip Cartridge 4 Modules version
(13) Ekip Cartridge 2 Modules version

(14) Connect the positive polarity supply cable to terminal K1 and the negative polarity supply cable to terminal K2

EM. Issue	DESCRIZIONE - Description	COMPIL. Drawn up	VERIFIC. Chk'd	APPROV. App'd	DATA Date
1	FIRST RELEASE	GM	PS	MB	04/07/19

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COMM.-Job E C T N?
9AKK107492A5524
FOGLIO Sheet 001 EM. Issue XX

TITOLO - Title
CONNECTION SCHEME
TMAX XT WITH MODBUS TCP/IP

IMPIANTO - Plant	DATA - Date	SCALA GRAFICA - Graphic scale	RIF. CLIENTE - Client ref.
XXX	XXX	XXX	XXX