



Key Features

The experiments are carried out using a computed based trainer with hardware and software covering the following topics:

Topics (33 different processes)

- Model Mask M1 Logic basic functions
- Model Mask M2 Digital functional modules
- Model Mask M3 Motor ON/OFF
- Model Mask M4 Reversing contactor
- Model Mask M5 Star-delta circuit
- Model Mask M6 Star-delta reversing circuit
- Model Mask M7 Reciprocating table control
- Model Mask M8 Dahlander circuit
- Model Mask M9 DS-motor with 2 coils
- Model Mask M10 DS-motor self-starter
- Model Mask M11 Conveyor belt system
- Model Mask M12 Reactive current compensation
- Model Mask M13 Heating control
- Model Mask M14 Running light
- Model Mask M15 Filling machine

Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.



Export Sales: +91-9829132777
India Sales: +91-9588842361



IT-2013, Ramchandrapura Industrial Area,
Sitapura Extension, Jaipur-302022, India.



info@tesca.in
www.tescaglobal.com

- Model Mask M16 Tank system
- Model Mask M17 Coal mill
- Model Mask M18 Embossing machine
- Model Mask M19 Ventilator control
- Model Mask M20 Construction site light signalling system
- Model Mask M21 Light signalling system
- Model Mask M22 Collective transport conveyor
- Model Mask M23 Conveyor belt feeding system
- Model Mask M40 Silo control
- Model Mask M41 Reactor
- Model Mask M42 Load lift
- Model Mask M43 Pump control
- Model Mask M44 Wastewater pump system
- Model Mask M45 Monitoring of 3 pumps
- Model Mask M46 Pump system (pressure)
- Model Mask M47 Drinks machine
- Model Mask M48 Mixing system
- Model Mask M49 Process control

Each system must be composed minimally by the following components:

1x Simatic CPU 1512C-1 PN+DP Trainer package

- Consisting of the PLC base unit and the trainer package consisting of profile rail, power supply, CPU module, digital input, Digital output, analog input, analog output, DP communication module, Ethernet connection cable and software package TIA - Portal.

Technical specifications:

PLC basic unit:

- 24 digital inputs including 16 with tactile detent switch; 16 digital outputs are directly accessible via 4mm safety sockets.
- 32 digital inputs and 32 digital outputs via 4 25-pin connector with occupancy for MCS accessible.
- 2 analog input channels and 2 analog O/Ps accessible via 4mm safety sockets.

Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.



Export Sales: +91-9829132777
 India Sales: +91-9588842361



IT-2013, Ramchandrapura Industrial Area,
 Sitapura Extension, Jaipur-302022, India.



info@tesca.in
 www.tescaglobal.com

Power supply:

- Input: 1-phase AC Supply voltage
- 1 at AC 120 V nominal value
- 2 at AC 230 V nominal value
- Rated line frequency 50 ... 60 Hz

Input current

- at nominal level of the input voltage 120 V 3.7 A
- at nominal level of the input voltage 230 V 1.7 A

CPU:

CPU 1512C-1 PN

- Display Screen size 3.45 cm
- Controls Number of keys 6
- Mode switch 11

Interface

Ports 2: RJ 45 (Ethernet) Integrated switch

2. Interface - Ports 1: RS 485

Programming

- STEP 7 TIA Portal can be configured / mixes
- Programming language - LAD, FBD, STL, SCL, GRAPH

Digital- analog inputs and outputs:

- Digital input DI 32 X DC24V
- Digital output DQ 32 X DC24V
- Analog input AI 4 X U / I; 1 X R/RTD
- Analog output AQ 2 X U / I

1x HMI KTP700 BASIC

Basic Panel, touch screen and tactile keys, 7" touch + key TFT Display 65536 colours, MPI, Profi-bus DP, PROFINET interface software WINCC BASIC V13/STEP 7 BASIC V13.

Built in a panel, all connections on the back side.

Technical specifications:

- Resolution: 800 x 480 Pixel
- 8x Number of function keys

Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.



Export Sales: +91-9829132777
 India Sales: +91-9588842361



IT-2013, Ramchandrapura Industrial Area,
 Sitapura Extension, Jaipur-302022, India.



info@tesca.in
 www.tescaglobal.com

- USB Interfaces: 1
- Industrial Ethernet : 1

Accessories:

- 1 Industrial Ethernet-switch 5x 10/100 Mbit/s
- 2 cable CAT 6, crossed
- 2 x RJ45 connector

1x Plant Simulator Unit for system simulator

The inputs and outputs are accessible via 4-mm safety sockets or a 700 mm long 50-pole flat-ribbon cable to a PLC or logic controller over a 50-pole socket.

Inputs / outputs

- 12 digital inputs, 12 digital outputs
- 2 analog inputs, 2 analog outputs
- 4 relay contacts NCC

Control and indication elements:

- 6 buttons
- 6 toggle switches
- 33 LEDs
- 2 potentiometers for 0 ... 10 V DC
- 1 red bar graph indication with 24 segments
- Digital in and output voltage of 24 V DC
- Analog in and output voltage of 0 ... 10 V DC
- Required power supply: 24 V DC, 0.7 A max.
- Ethernet RJ 45
- USB

1x Set of Process simulation Model Masks

- Model Mask M1 Logic basic functions
- Model Mask M2 Digital function modules

Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.



Export Sales: +91-9829132777
 India Sales: +91-9588842361



IT-2013, Ramchandrapura Industrial Area,
 Sitapura Extension, Jaipur-302022, India.



info@tesca.in
 www.tescaglobal.com

- Model Mask M3 Motor ON/OFF
- Model Mask M4 Reversing contactor
- Model Mask M5 Star-delta connection
- Model Mask M6 Reversing star-delta connection
- Model Mask M7 Pendulum table control
- Model Mask M8 Dahlander circuit
- Model Mask M9 Motor with 2 windings
- Model Mask M10 Motor self-starter
- Model Mask M11 Conveyor belt system
- Model Mask M12 Reactive-current compensation
- Model Mask M13 Heating control
- Model Mask M14 Running light
- Model Mask M15 Tablets machine
- Model Mask M16 Tank system
- Model Mask M17 Coal grinder
- Model Mask M19 Fan control
- Model Mask M20 Traffic light for road works
- Model Mask M21 Traffic lights
- Model Mask M22 Collecting belt conveyor
- Model Mask M23 Conveyor charging system
- Model Mask M18 Embossing machine
- Model Mask M40 Silo control
- Model Mask M41 Reactor
- Model Mask M42 Goods lift
- Model Mask M43 Pump control
- Model Mask M44 Dirty-water pump system
- Model Mask M45 Monitoring of 3 pumps
- Model Mask M46 Pump system (pressure)

Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.



Export Sales: +91-9829132777
India Sales: +91-9588842361



IT-2013, Ramchandrapura Industrial Area,
Sitapura Extension, Jaipur-302022, India.



info@tesca.in
www.tescaglobal.com



- Model Mask M47 Drinks machine
- Model Mask M48 Mixer
- Model Mask M49 Sequence control



Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.



Export Sales: +91-9829132777
India Sales: +91-9588842361



IT-2013, Ramchandrapura Industrial Area,
Sitapura Extension, Jaipur-302022, India.



info@tesca.in
www.tescaglobal.com