

SAFETY PRODUCTS

Programmable safety controller

Pluto

Pluto is a cost effective, powerful and compact programmable safety controller used in a variety of applications: in large and small systems, for process and functional safety.

Pluto can control most types safety devices on the market, as well as ABB DYNlink safety devices, analog sensors, encoders, contactors, valves and many more. Programming is done easily in the complimentary software, Pluto Manager.

The models with safety bus communication simplify the design of safety systems, thanks to our All-Master concept. A wide range of gateways allows communication with other networks and also remote monitoring of a Pluto system.



Speed up installation

Great flexibility

Up to 32 Pluto units can exchange data on the same safety bus, and the unique All-Master system allows simple scaling, splitting and modification.

Powerful yet compact

Unexpected features for its size, like real programming and speed monitoring, enables replacement of more complex PLC systems in some applications.

More sensors and less cabling

The DYNlink solution allows series connection of up to 10 safety devices on each input. StatusBus and light button feature also reduces cabling to a minimum.



Optimum interface

Programming software free of charge

Pluto Manager is an easy to use PC based programming software provided free of charge.

Easy programming

Ready-made TÜV approved function blocks for safety functions make it easy to reach PL e/SIL3. Ladder logic and text programming allow the design of more advanced functions and the control of complete machines.

Communication with external networks

Pluto gateways provide a two-way communication between the Pluto safety bus and other field buses.



Continuous operation

Easy modification

Easy and quick replacement of units without any configuration.

Flexible monitoring

Online monitoring from any Pluto in the system and remote monitoring and control with an Ethernet gateway.

Pluto ordering table

Pluto is available in different models depending on the needs of your application. Optional features includes bus communication, high resolution analog inputs and current monitoring.



Pluto S20 v2

2TLC010035V0201



Pluto D45

2TLC010035V0201

| Safety bus | Failsafe outputs ^{a)} | Failsafe inputs (max) ^{b)} | Analog inputs (max) ^{b)} | Fast counter inputs (max) ^{b)} | StatusBus inputs (max) ^{b)} | Non failsafe outputs (max) ^{b)} | Width mm | Type | Order code | |
|------------|--------------------------------|-------------------------------------|-----------------------------------|---|--------------------------------------|--|----------|-------------------------|-----------------|-----------------|
| No | 4 | 16 | 1 ^{c)} | - | 4 | 8 | 45 | Pluto S20 | 2TLA020070R4700 | |
| | 6 | 40 | 3 ^{c)} | - | 4 | 16 | 90 | Pluto S46 | 2TLA020070R1800 | |
| Yes | - | 22 | 1 ^{c)} | - | 4 | 8 | 45 | Pluto B22 ^{e)} | 2TLA020070R4800 | |
| | 2 | 4 | - | - | 2 | 2 | 45 | Pluto O2 ^{f)} | 2TLA020070R8500 | |
| | 4 | 16 | 1 ^{c)} | - | 4 | 8 | 45 | Pluto A20 ^{g)} | 2TLA020070R4500 | |
| | | | | | | | | Pluto B20 | 2TLA020070R4600 | |
| | 6 | 40 | 3 ^{c)} | 4 ^{d)} + 1 ^{c)} | - | 4 | 8 | 45 | Pluto D20 | 2TLA020070R6400 |
| | | | | 39 | 8 ^{d)} | 4 | 4 | 15 | 90 | Pluto B46 |
| Pluto D45 | | | | | | | | | | 2TLA020070R6600 |

Technical data

Approvals



Conformity



2006/42/EC - Machinery
 2014/30/EU - EMC
 2011/65/EU - RoHS
 EN ISO 13849-1:2015, IEC 62061:2015+Corr.1:2015, EN 61496-1:2013(in extracts), EN 574:1996+A1:2008(in extracts), EN 692, EN 60204-1:2006+A1:2009+AC:2010, EN 50178:1997, EN 61000-6-2, EN 61000-6-4, EN 61000-4-1...6, IEC 61508:2010, IEC 61511-1, EN 50156-1, EN 50156-2:2015, ISO 13851:2002 (in extracts)

Functional safety data

| | | PFH _o Failsafe relay outputs | PFH _D Failsafe transistor outputs |
|-----------------------|------------|---|--|
| EN 61508:2010 | SIL3 | 2.00 × 10 ⁻⁹ | 1.5 × 10 ⁻⁹ |
| EN 62061:2005+A1:2013 | SILCL3 | 2.00 × 10 ⁻⁹ | 1.5 × 10 ⁻⁹ |
| EN ISO 13849-1:2008 | PL e/Cat.4 | 2.00 × 10 ⁻⁹ | 1.5 × 10 ⁻⁹ |

Note

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