SAFETY PRODUCTS

Programmable safety controller
Pluto

Pluto is a cost effective, powerful and compact pro-grammable safety controller used in a variety of ap-plications: 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, ana-log sensors, encoders, contactors, valves and many more. Programming is done easily in the compli-mentary software, Pluto Manager.

The models with safety bus communication sim-plify the design of safety systems, thanks to our All-Master concept. A wide range of gateways al-lows 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 monitor-ing, enables replacement of more com-plex 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 provid-ed 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 de-sign of more advanced functions and the control of complete machines.

Communication with external net-works
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

Pluto D45

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
			4 d) + 1 c)	-	4	8	45	Pluto D20	2TLA020070R6400
	6	40	3 c)	-	4	16	90	Pluto B46	2TLA020070R1700
		39	8 d)	4	4	15	90	Pluto D45	2TLA020070R6600

Technical data

Approvals

TÜVRheinland CERTIFIED — Functional Safety Type Approved — www.tuv.com ID 0600000000 — CSA us

Conformity

CE
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_D 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}

—
ABB Electrification Sweden AB
SE-721 61 Västerås, Sweden
Tel. +46 (0)21-32 50 00

www.abb.com/low-voltage

Note
We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.