

CERTIFICATE

EC Declaration of Conformity

We ABB AG
Process Automation Division
Kallstadter Strasse 1
68309 Mannheim
Germany

Manufacturer

declare under our sole responsibility that the equipment:

Procontrol P14 Control System components listed in Appendix A

Kind of equipment

to which this declaration relates, is in conformity with the requirements of the following Council Directives:

EMC Directive	2014/30/EU
RoHS 2 Directive	2011/65/EU

The following harmonized European standards or technical specifications have been applied:

EN 61000-6-4: 2007+A1:2011	DIN EN 61000-6-4:2011-09	EMC, Emission
EN 61000-6-2: 2019	DIN EN 61000-6-2:2019	EMC, Immunity
EN 61000-6-5:2015	DIN EN 61000-6-5:2016-07	EMC, Immunity

The technical data applied to verify conformity with the above standards can be found in Appendix B.

Additional information:

Procontrol P14 is a specifically designed process control system for large-scale fixed installations in thermal and hydro power plants. Some Procontrol P14 products are exempted from the scope of Directive 2011/65/EU of the European Parliament and the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) as provided in Article 2(4)(c) and (e) therein.

CE-marking was affixed in 2016
Year four digits

Mannheim, June 8th, 2021

Place & date

Product Line Manager Procontrol P14

Position

Signature

Johannes Keilmann

Full name

Appendix A - Procontrol P14 Components

In-/Output Modules

Identification Number	Description
GJR2394100R1210	81AA03R1210 Output Module Analog Signals
GJR2392500R1210	81AB03R1210 Output Module Binary Signals
GJR2397800R0100	81AR01R0100 Relay Output Module PF
GJR2397800R0200	81AR01R0200 Relay Output Module PF
GJR2393400R1210 ¹⁾	81EA04R1210 Input Module Analog
GJR2403800R1210	81EU50R1210 Input Module Universal

Control Modules

Identification Number	Description
GJR2390200R1411 ¹⁾	83SR04R1411 Control Module Universal
GJR2395500R1210	83SR50R1210 Control Module
GJR2396200R1210	83SR51R1210 Control Module
GKWE858000R1210	83SR52R1210 Control Module

Communication Modules

Identification Number	Description
GKWE860700R1210	87TP50R1210 Coupling Module Modbus
GJR2368900R1313 ¹⁾	87TS01R1313 Coupling Module Time Master FDDI
GJR2368900R1550 ^{1) 2)}	87TS01R1550 Coupling Module CDS Master FDDI
GJR2368900R1551 ^{1) 2)}	87TS01R1551 Coupling Module CDS Slave FDDI
GKWE858300R1210	87TS51R1210 HMI Coupling Module VST & FDDI
GKWE858300R1250	87TS51R1250 Engineering Tool Coupling Module
GJR2393600R0100	88FK05R0100 Remote Bus Coupling Module
GJR2393100R1200 ¹⁾	88FT05R1200 Station Modem Module
GJR2393200R1250 ¹⁾	88TK05R1250 Coupling Module MS/FDDI
GJR2397000R1210 ¹⁾	88TK50R1210 Station Bus Coupling FDDI
GJR2397000R1350 ¹⁾	88TK50R1350 Coupling Module FDDI/MS

Turbine Modules

Identification Number	Description
GKWN000317R0200	89AS30R0200 Analog Signal Multiplier
GKWN000314R0200	89AU30R0200 Analog Converter
GKWN000313R0200	89AV30R0200 1-out-of-2 Voter
GKWN000315R0200	89EI30R0200 Signal Level Converter
GKWP981691R0001	89PA30R0001 Test/Monitoring Module TC
GKWP981691R0301	89PA30R0301 Test/Monitoring Module TC
GJR2398300R0100	89XV01R0100 Fusing Module

Accessories

Identification Number	Description
GKWE858500R0100	89IL50R0100 Connection Circuit Board 88TK50
GKWE858500R0200	89IL50R0200 Connection Circuit Board 88TK50
GJR2394400R0100L	88TB07R0100L Station Bus Termination Module

¹⁾ Products are not compliant to the Directive 2011/65/EU of the European Parliament and the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS). Refer to the additional information on page 1.

Appendix B – Technical Data

The technical data described below is ranked higher than the technical data specified in the corresponding section of the Procontrol P14 Data Sheets. The technical data is only valid if the components are installed according to the installation rules described in Appendix C.

Data on Electromagnetic Compatibility (EMC)		
Environmental Parameter	Standard	Characteristic/Value
Electrostatic discharge immunity	IEC/EN 61000-4-2	
	Class 3	Air discharge 8 kV
	Class 3	Contact discharge 6 kV
Radiated, radio-frequency, electromagnetic field immunity	IEC/EN 61000-4-3	80 MHz to 6000 MHz,
	Class 3	10 V/m, 80 % AM (1 kHz)
Electrical fast transient/burst immunity	IEC/EN 61000-4-4	5/50 ns
	Class 3	
Supply lines for DC 24 V		4 kV
Signal lines (I/O and bus lines)		2 kV
Surge immunity	IEC/EN 61000-4-5	1.2/50 ns
	Class 1/1	0.5/0.5 kV
Supply lines for DC 24 V	Class 3	2 kV
Signal lines (I/O and bus lines)		
Immunity to conducted disturbances, induced by radio-frequency fields	IEC/EN 61000-4-6	0.15 MHz to 80 MHz,
	Class 3	10 V, 80% AM (1 kHz), Source impedance 150 Ω
Radiated emission	CISPR16 / EN 55016	30 MHz to 6000 MHz,
	Class A	Limit Class A, group 1
Immunity to conducted, common mode disturbances in the frequency range 0 Hz to 150 kHz	IEC/EN 61000-4-16	
Supply lines for DC 24 V		10 / 100 V
Signal lines (I/O and bus lines)		10 / 100 V
Ripple on d.c. input power port immunity	IEC/EN 61000-4-17	
Supply lines for DC 24 V		10 %
Damped oscillatory wave immunity	IEC/EN 61000-4-18	
Supply lines for DC 24 V		1 MHz, 10 MHz
Signal lines (I/O and bus lines)		1 kV CM, 0.5 kV DM
Voltage dips, short interruptions and voltage variations on d.c. input power port immunity	IEC/EN 61000-4-29	
Supply lines for DC 24 V		Requirements fulfilled through redundant power supply

Appendix C – Installation Rules

Installation

Electronic modules must be installed in the standardized Procontrol P14 control cabinets.

Electrical Grounding

The cabinet must be grounded locally with an earthing copper cable, min. 35 mm² cross section. For a row of cabinets, the individual earthing cable can be replaced by a conductive cabinet mounting frame. Conductivity of cabinet and mounting frame must be durable and reliable. The mounting frame must be connected to the ground net on both ends via an earthing cable of min. 35 mm² cross section. Earthing cables must be as short as possible.

Signal and Bus Cabling

Signal cables (I/O, 24V DC) must be shielded (cable type RD-Y(St)Y or equivalent). Cable shields must be connected to the cabinet's cable compartment only via a cable of minimum length. Shields of the remote bus twinax cable (type 44B628, 87JF01) must be grounded directly in the cabinet's cable compartment.

Installation of Coupling Module 87TS01R15xx

²⁾ Between the Coupling Module 87TS01R15xx and the PC on which the CDS is installed, an additional galvanic isolation interface with an isolation voltage of min. 1 kV is required (e.g. W&T Interface USB <> RS232/RS422/RS485 Industry).