MANUFACTURER DOCUMENT PACKAGE

# Manufacturer's Manual

Reference package for procurement and maintenance review

ABB

## DO821

**RELAY DIGITAL OUTPUT MODULE**

Used with the applicable S800 I/O configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: ABB Compact Product Suite Catalog 3BSE062980; exact-model ABB hardware-selector specifications

# S800 I/O modules selection guide

| | NAMUR inputs | Binary 24 V | Binary 48 V | Binary 110 V | Binary 230 V | Binary Relay | Analog Unipolar | Analog Bipolar | Temperature RTD | Temperature T/C | SOE | HART | Intrinsic safety | Redundant | High integrity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **I/O Features S800** | | | | | | | | | | | | | | | |
| **Digital input modules** | | | | | | | | | | | | | | | |
| DI810 | | • | | | | | | | | | | | | | |
| DI811 | | | • | | | | | | | | | | | | |
| DI814 | | • | | | | | | | | | | | | | |
| DI818 | | • | | | | | | | | | | | | | |
| DI820 | | | | • | | | | | | | | | | | |
| DI821 | | | | | • | | | | | | | | | | |
| DI825 | | | | • | | | | | | | • | | | | |
| DI828 | | | | • | | | | | | | | | | | |
| DI830 | | • | | | | | | | | | • | | | | |
| DI831 | | | • | | | | | | | | • | | | | |
| DI840 | | • | | | | | | | | | • | | | • | |
| DI880 | | • | | | | | | | | | • | | | • | • |
| DI890 | • | | | | | | | | | | | | • | | |
| **Digital output modules** | | | | | | | | | | | | | | | |
| DO810 | | • | | | | | | | | | | | | | |
| DO814 | | • | | | | | | | | | | | | | |
| DO815 | | • | | | | | | | | | | | | | |
| DO818 | | • | | | | | | | | | | | | | |
| DO820 | | | | | | • | | | | | | | | | |
| DO821 | | | | | | • | | | | | | | | | |
| DO828 | | | | | | • | | | | | | | | | |
| DO840 | | • | | | | | | | | | | | | • | |
| DO880 | | • | | | | | | | | | | | | • | • |
| DO890 | | | | | | | | | | | | | • | | |
| **Pulse input modules** | | | | | | | | | | | | | | | |
| DP820 | | • | | | | | | | | | | | | | |
| DP840 | • | • | | | | | | | | | | | | • | |
| **Analog input modules** | | | | | | | | | | | | | | | |
| AI810 | | | | | | | • | | | | | | | | |
| AI815 | | | | | | | • | | | | | • | | | |
| AI820 | | | | | | | | • | | | | | | | |
| AI825 | | | | | | | | • | | | | | | | |
| AI830A | | | | | | | | | • | | | | | | |
| AI835A | | | | | | | | | | • | | | | | |
| AI843 | | | | | | | | | | • | | | | • | |
| AI845 | | | | | | | • | | | | | • | | • | |
| AI880A | | | | | | | • | | | | | • | | • | • |
| AI890 | | | | | | | • | | | | | | • | | |
| AI893 | | | | | | | | | • | • | | | • | | |
| AI895 | | | | | | | • | | | | | • | • | | |
| **Analog output modules** | | | | | | | | | | | | | | | |
| AO810V2 | | | | | | | • | | | | | | | | |
| AO815 | | | | | | | • | | | | | • | | | |
| AO820 | | | | | | | | • | | | | | | | |
| AO845A | | | | | | | • | | | | | • | | • | |
| AO890 | | | | | | | • | | | | | | • | | |
| AO895 | | | | | | | • | | | | | • | • | | |
| **S800L modules** | | | | | | | | | | | | | | | |
| DI801 | | • | | | | | | | | | | | | | |
| DI802 | | | | • | | | | | | | | | | | |
| DI803 | | | | | • | | | | | | | | | | |
| DO801 | | • | | | | | | | | | | | | | |
| DO802 | | | | | | • | | | | | | | | | |
| AI801 | | | | | | | • | | | | | | | | |
| AO801 | | | | | | | • | | | | | | | | |

# S800 I/O
## S800 I/O Modules

| Digital Output Modules | | Article no. | |
|---|---|---|---|
|  | **DO810 Digital Output 24 V 16 ch.**<br>Isolated in two groups of 8 channels. 0.5A, Short circuit proof. Use Module Termination Unit TU810, TU812, TU814, TU830, TU833. | 3BSE008510R1 | |
| | **DO814 Digital Output Current 16 ch.**<br>Isolated in two groups of 8 channels. 0,5A , shortcut circuit proof. Current sinking. Use Module Termination Unit TU810, TU812, TU814, TU830, TU833, TU838. | 3BUR001455R1 | |
| | **DO815 Digital Output 24V 8 ch.**<br>Isolated in two groups of 4 channels. 2.0A short circuit proof. Use Module Termination Unit TU810, TU812, TU814, TU830, TU833. | 3BSE013258R1 | |
| | **DO818 Digital Output 24V 32 ch.**<br>Isolated in two groups of 16 channels. 0.5A, Short circuit proof. Use Module Termination Unit TU818, TU819, TU830. | 3BSE069053R1 | |
| | **DO820 Digital Output Relay 8 ch.**<br>24-230V a.c../d.c. 3A, cos phi>0.4, d.c. 42W. Individually galvanic isolated channels. Use Module Termination Unit TU811, TU813, TU831, TU836, TU837, TU851. | 3BSE008514R1 | |
| | **DO821 Digital Output Relay 8 ch.**<br>24-230V a.c./d.c.. 3A, cos phi>0.4, d.c. 42W, normal closed. Individually galvanic isolated channels. Use Module Termination Unit TU811, TU813, TU831, TU836, TU837, TU851. | 3BSE013250R1 | |
| | **DO828 Digital Output 16 ch.**<br>Individually galvanic isolated channels. 5-250V a.c and 5-125V d.c, max 2A. Use Module Termination Unit TU851. | 3BSE069055R1 | |
| | **DO840 Digital Output 24V S/R 16 ch.**<br>Isolated in two groups of 8 channels. Single or redundant. 0.5A. Advanced On-board diagnostics. Use Module Termination Unit TU810, TU812, TU814, TU830, TU833, TU842, TU843, TU852. | 3BSE020838R1 | |
| | **DO890 Digital Output IS 4 ch.**<br>Intrinsic Safety Interface. Individually galvanic isolated channels. Use Module Termination Unit TU890 or TU891. | 3BSC690074R1 | |

# S800 I/O
## Pulse Counting Modules

| Pulse Counting Modules | | Article no. | |
|---|---|---|---|
|  | **DP820 Pulse Counter RS-422**<br>2 ch bidirectional pulse counters and frequency measurement, current, 5V, (12v), 24V. 1,5MHz Rated isol 50V Use Module Termination Unit TU810, TU812, TU814, TU830, TU833. | 3BSE013228R1 | |
| | **DP840 Pulse Counter S/R 8 ch.**<br>Pulse Counter or Frequency Measurement Module. Redundant or single. 0.5Hz - 20kHz.<br>Use Module Termination Unit TU810, TU812, TU814, TU818, TU830, TU833, TU842, TU843, TU844, TU845, TU852, TU854. | 3BSE028926R1 | |