



The AC 870P control sub-system includes a new compact DIN rail mountable device. With this compact and DIN rail mounted device, customers get the latest control technology dedicated to installation in the field. Inherent redundancy design with integrated redundancy concepts for power supply, communication and I/O without additional configuration provide the highest level of availability. The assembly consists of a Main CPU-housing and connectable extension housings. A maximum of two extension houses are possible. 12 slots are possible with the maximum of two extension housings.

The usable portfolio of AC 870P housings, PH 875 and PH 870, consist of PM 875, a CCF 10-P as Modbus interface, a CCR 70-P and the wide range of I/O interfaces. The CCR 70-P works as repeater for the AC 870P/Melody own high-speed serial communication network with inherent capability for remote communication. The network is easy to handle and does not need any routing configuration. A complete AC 870P within two extension housings can accommodate a redundant pair of PM 875's and an additional eight I/O modules. Optionally, ten I/O modules and two Fnet repeaters can be installed for a complete remote I/O solution.

| Main- and Extension Housing |   |
|-----------------------------|---|
| <b>Mechanical data</b>      |   |
| Housing type                | DIN-Rail mounted  |
| Dimensions of cabinet frame | Width: 215 mm   |
|                             | Depth: 200 mm   |
|                             | Height: 365 mm  |
| Cabinet frame               | Steel panel, powder coated  |
| Mounting                    | Double DIN-Rail, EN 50022 35 x 7,5/15, Spacing 202 mm (center/center)               |
| Weight                      | Approx. 3.5 kg (Main housing, without modules)                                      |
| Color                       | RAL 9002  |
| Enclosure rating            | IP 20 (standard)  |
| <b>Electrical data</b>      |   |
| Insulation test             | Test performed on lines as per VDE 0660   |
|                             | Bus flat cable: 500 V wire against wire   |
|                             | 230 V (AC) input: 2500 V against housing  |
| Shield connection           | Shielding of the field cable is grounded at the AC 870P housing and at the DIN-Rail |
| Power supply                | SD 822, 5 A   |
|                             | SD 823, 10 A  |

| Basic Specification                                      |   |  |
|--|---|--|
| Power supply (all consuming modules)                     | +24 V DC (+20... +33 V DC)<br>Details see "AC870P/Melody System Data and Handling (2PAA101137)" |  |
| <b>Climatic conditioning AC 870P housing and modules</b> |   |  |
| Permissible ambient temperature                          | 0 ... 45° C   | Permissible housing intake temperature according to power loss and protection type |
|  | 0 ... 50° C   | Permissible module intake temperature  |
|  | 0 ... 70° C   | Module operating range   |
|  | -30...85°C  | Transportation/storage   |
| Permissible relative air humidity                        | Yearly average 75 %; with no condensation in operation  |  |
|  | approx. 95 % condensation permissible in transportation/storage                                 |  |
| Climatic class   | 3K3 to DIN EN 60 721 part 3-3   |  |
|  | KSF to DIN 40 040 (of 04.87)  |  |
|  |   |  |

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