SIEMENS

Data sheet

6ES7132-0BH01-0XB0

*** SPARE PART*** SIMATIC DP, ELECTRONIC MODULE DIGITAL, FOR ET 200B, W=160MM, 16DO 24V DC, (12X0.5A; 4X2A), DEGR. OF PROTECT. IP20,STANDARD

| Rated value (DC) 24 V; L1+, L2+, L3+; value at t < 0.5 s: 35 V permissible range, lower limit (DC) 18.5 V permissible range, upper limit (DC) 30.2 V Input current 80 mA; from L3+; logic Current consumption, typ. 80 mA; from L3+; logic PM 0.05 A*s; with starting current inrush Power loss Power loss Power loss, max. 5 W Hardware configuration Rack required terminal block TB1/DC, TB1-4/DC, TB3/DC, TB3-4/DC Digital outputs 16 Number of digital outputs 16 Short-circuit protection Yes; Electronic Limitation of inductive shutdown voltage to typ. (L1+, L2+) -55 V Controlling a digital input Yes Switching capacity of the outputs • on lamp load, max. • on lamp load, max. 5 W; at I = 0.5 A; max. 10 W at I = 2 A Output voltage • for signal "1", min. • for signal "0", max. 2 V; idling • for signal "0", max. 2 A; 2x 2 A and 6x 0.5 A • for signal "1", min. UE -3 V Output outrent • for signal "1", max. • for signal "0" residual current, ma | Supply voltage | |
|---|--|--|
| permissible range, upper limit (DC) 30.2 V Input current Current consumption, typ. 80 mA; from L3+; logic Pt 0.05 A*s; with starting current inrush Power loss Power loss Power loss, max. 5 W Hardware configuration Starting current inrush Rack • required terminal block Digital outputs 16 Number of digital outputs 16 Short-circuit protection Yes; Electronic Limitation of inductive shutdown voltage to typ. (L1+, L2+) -55 V Controlling a digital input Yes Switching capacity of the outputs • on lamp load, max. • on lamp load, max. 5 W; at I = 0.5 A; max. 10 W at I = 2 A Output voltage • for signal "0", max. • for signal "1", min. UE -3 V Output current • for signal "1" permissible range, max. 2 A; 2x 2 A and 6x 0.5 A • for signal "1" permissible range, max. 1 mA Switching frequency • with resistive load, max. 8 Hz • with mig load, max. 8 Hz Total current of the outputs (per group) all mounting positions all mounting positions 8 Hz | Rated value (DC) | 24 V; L1+, L2+, L3+; value at t < 0.5 s: 35 V |
| Input current Current consumption, typ. 80 mA; from L3+; logic Pt 0.05 A*s; with starting current inrush Power loss Power loss, max. 5 W Hardware configuration Rack * • required terminal block TB1/DC, TB1-4/DC, TB3/DC, TB3-4/DC Digital outputs 16 Number of digital outputs 16 Short-circuit protection Yes; Electronic Limitation of inductive shutdown voltage to typ. (L1+, L2+) -55 V Controlling a digital input Yes Switching capacity of the outputs 5 W; at I = 0.5 A; max. 10 W at I = 2 A Output voltage • for signal *0°, max. 5 W; at I = 0.5 A; max. 10 W at I = 2 A Output voltage • for signal *0°, max. 2 V; idling • for signal *0°, max. 2 V; idling • for signal *0°, max. • for signal *0° residual current, max. 1 mA Switching frequency • with inductive load, max. 0.5 Hz 0.5 Hz • on lamp load, max. 8 Hz 0.5 Hz • on lamp load, max. 8 Hz 0.5 Hz • on lamp load, max. 8 Hz 0.5 Hz • on lamp load, max. 8 | permissible range, lower limit (DC) | 18.5 V |
| Current consumption, typ. 80 mA; from L3+; logic Pt 0.05 A*s; with starting current inrush Power loss 5 W Power loss, max. 5 W Hardware configuration 7 Rack • required terminal block • required terminal block TB1/DC, TB1-4/DC, TB3/DC, TB3-4/DC Digital outputs 16 Number of digital outputs 16 Short-circuit protection Yes; Electronic Limitation of inductive shutdown voltage to typ. (L1+, L2+) -55 V Controlling a digital input Yes Switching capacity of the outputs 0 • on lamp load, max. 5 W; at I = 0.5 A; max. 10 W at I = 2 A Output voltage • • Atted value (DC) 24 V • for signal "0", max. 2 V; idling • for signal "1", min. UE -3 V Output current • • for signal "1" permissible range, max. 2 A; 2x 2 A and 6x 0.5 A • for signal "1" permissible range, max. 2 A; 2x 2 A and 6x 0.5 A • for signal "1" permissible range, max. 0.5 Hz • with inductive load, max. 0.5 Hz • with inductive load | permissible range, upper limit (DC) | 30.2 V |
| Pt 0.05 A ² s; with starting current inrush Power loss, max. 5 W Hardware configuration 5 W Rack • required terminal block TB1/DC, TB1-4/DC, TB3/DC, TB3-4/DC Digital outputs Number of digital outputs 16 Short-circuit protection Yes; Electronic Limitation of inductive shutdown voltage to t/p. (L1+, L2+) -55 V Controlling a digital input Yes Switching capacity of the outputs • on lamp load, max. 5 W; at I = 0.5 A; max. 10 W at I = 2 A Output voltage • Rated value (DC) 24 V • for signal "0", max. 2 V; idling • for signal "1", min. UE -3 V Output current • for signal "1" permissible range, max. 1 mA Switching frequency • with inductive load, max. 0.5 Hz • on lamp load, max. 8 Hz Total current of the outputs (per group) all mounting positions | Input current | |
| Power loss Power loss, max. 5 W Hardware configuration Rack • required terminal block TB1/DC, TB1-4/DC, TB3/DC, TB3-4/DC Digital outputs 16 Number of digital outputs 16 Short-circuit protection Yes; Electronic Limitation of inductive shutdown voltage to typ. (L1+, L2+) -55 V Controlling a digital input Yes Switching capacity of the outputs • on lamp load, max. • Name 5 W; at I = 0.5 A; max. 10 W at I = 2 A Output voltage • • Rated value (DC) 24 V • for signal "0", max. 2 V; idling • for signal "1", min. UE -3 V Output current • • for signal "1" permissible range, max. 1 mA Switching frequency • • with inductive load, max. 00 Hz • with inductive load, max. 0.5 Hz • on lamp load, max. 8 Hz Total current of the outputs (per group) all mounting positions | Current consumption, typ. | 80 mA; from L3+; logic |
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| Hardware configuration Rack • required terminal block TB1/DC, TB1-4/DC, TB3/DC, TB3-4/DC Digital outputs Number of digital outputs 16 Short-circuit protection Yes; Electronic Limitation of inductive shutdown voltage to typ. (L1+, L2+) -55 V Controlling a digital input Yes Switching capacity of the outputs - • on lamp load, max. 5 W; at I = 0.5 A; max. 10 W at I = 2 A Output voltage - • Rated value (DC) 24 V • for signal "0", max. 2 V; idling • for signal "1", min. UE -3 V Output current - • for signal "0" residual current, max. 1 mA Switching frequency - • with inductive load, max. 0.5 Hz • on lamp load, max. 0.5 Hz • on lamp load, max. 8 Hz Total current of the outputs (per group) all mounting positions | Power loss | |
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| • required terminal block TB1/DC, TB1-4/DC, TB3/DC, TB3-4/DC Digital outputs 16 Number of digital outputs protection Yes; Electronic Limitation of inductive shutdown voltage to typ. (L1+, L2+) -55 V Controlling a digital input Yes Switching capacity of the outputs • on lamp load, max. • on lamp load, max. 5 W; at I = 0.5 A; max. 10 W at I = 2 A Output voltage • • for signal "0", max. 2 V; idling • for signal "1", min. UE -3 V Output current • • for signal "1" permissible range, max. 2 A; 2x 2 A and 6x 0.5 A • for signal "0" residual current, max. 1 mA Switching frequency • • with inductive load, max. 0.5 Hz • on lamp load, max. 8 Hz Total current of the outputs (per group) all mounting positions | Hardware configuration | |
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| Number of digital outputs 16 Short-circuit protection Yes; Electronic Limitation of inductive shutdown voltage to typ. (L1+, L2+) -55 V Controlling a digital input Yes Switching capacity of the outputs • on lamp load, max. • on lamp load, max. 5 W; at I = 0.5 A; max. 10 W at I = 2 A Output voltage • Rated value (DC) • for signal "0", max. 2 V; idling • for signal "1", min. UE -3 V Output current • for signal "1" permissible range, max. • for signal "0" residual current, max. 1 mA Switching frequency • with resistive load, max. • with nductive load, max. 0.5 Hz • on lamp load, max. 8 Hz Total current of the outputs 8 Hz | required terminal block | TB1/DC, TB1-4/DC, TB3/DC, TB3-4/DC |
| Short-circuit protection Yes; Electronic Limitation of inductive shutdown voltage to typ. (L1+, L2+) -55 V Controlling a digital input Yes Switching capacity of the outputs • on lamp load, max. • on lamp load, max. 5 W; at I = 0.5 A; max. 10 W at I = 2 A Output voltage • en signal "0", max. • for signal "0", max. 2 V; idling • for signal "1", min. UE -3 V Output current • on signal "1" permissible range, max. • for signal "0" residual current, max. 1 mA Switching frequency • with resistive load, max. • with niductive load, max. 0.5 Hz • on lamp load, max. 8 Hz Total current of the outputs (per group) all mounting positions | Digital outputs | |
| Limitation of inductive shutdown voltage totyp. (L1+, L2+) -55 VControlling a digital inputYesSwitching capacity of the outputs• on lamp load, max.5 W; at I = 0.5 A; max. 10 W at I = 2 AOutput voltage• Rated value (DC)24 V• for signal "0", max.2 V; idling• for signal "1", min.UE -3 VOutput current1 mA• for signal "1" permissible range, max.2 A; 2x 2 A and 6x 0.5 A• for signal "0" residual current, max.1 mASwitching frequency• with resistive load, max.• with neustive load, max.0.5 Hz• on lamp load, max.8 Hz• on lamp load, max.8 Hz• on lamp period, max.8 Hz• on lamp period, max.9 Hz | Number of digital outputs | 16 |
| Controlling a digital inputYesSwitching capacity of the outputs5 W; at I = 0.5 A; max. 10 W at I = 2 AOutput voltage5 W; at I = 0.5 A; max. 10 W at I = 2 AOutput voltage24 V• Rated value (DC)24 V• for signal "0", max.2 V; idling• for signal "1", min.UE -3 VOutput current2 A; 2x 2 A and 6x 0.5 A• for signal "0" residual current, max.1 mASwitching frequency100 Hz• with inductive load, max.0.5 Hz• on lamp load, max.8 HzTotal current of the outputs (per group)all mounting positions | Short-circuit protection | Yes; Electronic |
| Switching capacity of the outputs• on lamp load, max.5 W; at l = 0.5 A; max. 10 W at l = 2 AOutput voltage24 V• Rated value (DC)24 V• for signal "0", max.2 V; idling• for signal "1", min.UE -3 VOutput current2 A; 2x 2 A and 6x 0.5 A• for signal "0" residual current, max.1 mASwitching frequency100 Hz• with resistive load, max.0.5 Hz• on lamp load, max.0.5 Hz• on lamp load, max.8 Hz• Total current of the outputs (per group)all mounting positions | Limitation of inductive shutdown voltage to | typ. (L1+, L2+) -55 V |
| • on lamp load, max.5 W; at I = 0.5 A; max. 10 W at I = 2 AOutput voltage• Rated value (DC)24 V• for signal "0", max.2 V; idling• for signal "1", min.UE -3 VOutput current• for signal "1" permissible range, max.2 A; 2x 2 A and 6x 0.5 A• for signal "0" residual current, max.1 mASwitching frequency• with resistive load, max.100 Hz• with inductive load, max.0.5 Hz• on lamp load, max.8 HzTotal current of the outputs (per group)all mounting positions | Controlling a digital input | Yes |
| Output voltage• Rated value (DC)24 V• for signal "0", max.2 V; idling• for signal "1", min.UE -3 VOutput current2 A; 2x 2 A and 6x 0.5 A• for signal "0" residual current, max.1 mASwitching frequency100 Hz• with resistive load, max.0.5 Hz• on lamp load, max.8 HzTotal current of the outputs (per group)all mounting positions | Switching capacity of the outputs | |
| Rated value (DC)24 V• for signal "0", max.2 V; idling• for signal "1", min.UE -3 VOutput current2 A; 2x 2 A and 6x 0.5 A• for signal "0" residual current, max.1 mASwitching frequency100 Hz• with resistive load, max.0.5 Hz• on lamp load, max.8 HzTotal current of the outputs (per group)all mounting positions | on lamp load, max. | 5 W; at I = 0.5 A; max. 10 W at I = 2 A |
| for signal "0", max. for signal "1", min. Output current for signal "1" permissible range, max. for signal "0" residual current, max. for signal "0" residual current, max. for signal "0" residual current, max. 1 mA Switching frequency with resistive load, max. non lamp load, max. total current of the outputs (per group) all mounting positions | Output voltage | |
| • for signal "1", min.UE -3 VOutput current2 A; 2x 2 A and 6x 0.5 A• for signal "1" permissible range, max.2 A; 2x 2 A and 6x 0.5 A• for signal "0" residual current, max.1 mASwitching frequency00 Hz• with resistive load, max.100 Hz• with inductive load, max.8 Hz• on lamp load, max.8 Hz• Total current of the outputs (per group)all mounting positions | Rated value (DC) | 24 V |
| Output current • for signal "1" permissible range, max. 2 A; 2x 2 A and 6x 0.5 A • for signal "0" residual current, max. 1 mA Switching frequency 100 Hz • with resistive load, max. 0.5 Hz • on lamp load, max. 8 Hz Total current of the outputs (per group) all mounting positions | • for signal "0", max. | 2 V; idling |
| • for signal "1" permissible range, max.2 A; 2x 2 A and 6x 0.5 A• for signal "0" residual current, max.1 mASwitching frequency100 Hz• with resistive load, max.100 Hz• with inductive load, max.0.5 Hz• on lamp load, max.8 HzTotal current of the outputs (per group)all mounting positions | ● for signal "1", min. | UE -3 V |
| • for signal "0" residual current, max.1 mASwitching frequency100 Hz• with resistive load, max.100 Hz• with inductive load, max.0.5 Hz• on lamp load, max.8 HzTotal current of the outputs (per group)all mounting positions | Output current | |
| Switching frequency • with resistive load, max. • with inductive load, max. • on lamp load, max. • Total current of the outputs (per group) all mounting positions | for signal "1" permissible range, max. | 2 A; 2x 2 A and 6x 0.5 A |
| • with resistive load, max.100 Hz• with inductive load, max.0.5 Hz• on lamp load, max.8 HzTotal current of the outputs (per group)all mounting positions | for signal "0" residual current, max. | 1 mA |
| with inductive load, max. on lamp load, max. 8 Hz Total current of the outputs (per group) all mounting positions | Switching frequency | |
| • on lamp load, max. 8 Hz Total current of the outputs (per group) all mounting positions | • with resistive load, max. | 100 Hz |
| Total current of the outputs (per group) all mounting positions | • with inductive load, max. | 0.5 Hz |
| all mounting positions | • on lamp load, max. | 8 Hz |
| | Total current of the outputs (per group) | |
| — up to 60 °C, max. 4 A | all mounting positions | |
| | — up to 60 °C, max. | 4 A |

| Cable length | |
|---|--|
| • unshielded, max. | 100 m |
| Interfaces | |
| PROFIBUS DP | |
| Transmission rate, max. | 12 Mbit/s |
| SYNC capability | Yes |
| | |
| Protocols | |
| Bus protocol/transmission protocol | PROFIBUS DP |
| Interrupts/diagnostics/status information | |
| Diagnostics indication LED | |
| RUN LED | Yes |
| Bus fault BF (red) | Yes |
| Status indicator digital output (green) | Yes |
| Potential separation | |
| between electronic block and PROFIBUS DP | Yes |
| Potential separation digital outputs | |
| Potential separation digital outputs | No |
| between the channels, in groups of | 8 |
| | |
| Degree and class of protection Degree of protection acc. to EN 60529 | IP20 |
| Degree of protection acc. to EN 00329 | IFZU |
| Ambient conditions | |
| Ambient temperature during operation | |
| horizontal installation, min. | 0°C |
| horizontal installation, max. | 60 °C; 40°C for other mountings |
| Air pressure acc. to IEC 60068-2-13 | |
| permissible range, lower limit | 795 hPa |
| permissible range, upper limit | 1 080 hPa |
| Relative humidity | |
| • Operation, min. | 15 % |
| • Operation, max. | 95 %; RH class 2 in accordance with IEC 1131-2 |
| Vibrations | |
| Operation, tested according to IEC 60068-2-6 | Yes; IEC 68, Part 2-6; 10 to 57 Hz; (constant amplitude 0.075 mm); 57 to 150 Hz; (constant acceleration 1 g) |
| Shock test | |
| tested according to IEC 60068-2-27 | Yes; IEC 68, Part 2-27; half-sine, 15 g, 11 ms |
| Connection method | |
| Design of electrical connection for the inputs and | Screw-type and spring-loaded terminals, permanent wiring; 3 and |
| outputs | 4-wire connection |
| Dimensions | |

| Width | 160 mm; EB and TB |
|-----------------|-------------------|
| Height | 130 mm; EB and TB |
| Depth | 60 mm; EB and TB |
| Weights | |
| Weight, approx. | 600 g; EB and TB |
| last modified: | 03/07/2017 |