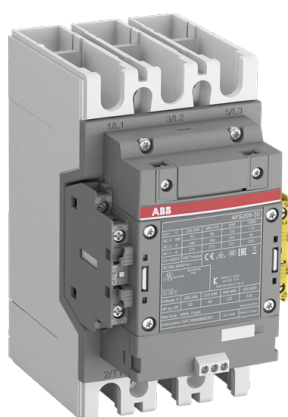


## PRODUCT-DETAILS

# AFS205-30-12-33

# AFS205-30-12-33



## General Information

|                       |                                                                                                                                                                                                                                             |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | AFS205-30-12-33                                                                                                                                                                                                                             |
| Product ID            | 1SFL527082R3312                                                                                                                                                                                                                             |
| EAN                   | 7320500541517                                                                                                                                                                                                                               |
| Catalog Description   | AFS205-30-12-33                                                                                                                                                                                                                             |
| Long Description      | A 3-phase Safety Contactor suitable for various applications such as Motor starting, Isolation, By-pass and Distribution application up to max 1000 V. Operated with wide control voltage range 100-250 V, 50/60 Hz and DC with PLC control |

## Ordering

|                        |          |
|------------------------|----------|
| Minimum Order Quantity | 1 piece  |
| Customs Tariff Number  | 85364900 |

## Popular Downloads

|                                   |                 |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SBC100208C02__ |
| Instructions and Manuals          | 1SFC100008M0201 |

## Dimensions

|                            |        |
|----------------------------|--------|
| Product Net Width          | 105 mm |
| Product Net Depth / Length | 152 mm |
| Product Net Height         | 196 mm |
| Product Net Weight         | 2.4 kg |

## Technical

|                                                       |                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Main Contacts<br>NO                         | 3                                                                                                                                                                                                                                                                                                                                                    |
| Number of Main Contacts<br>NC                         | 0                                                                                                                                                                                                                                                                                                                                                    |
| Number of Auxiliary<br>Contacts NO                    | 1                                                                                                                                                                                                                                                                                                                                                    |
| Number of Auxiliary<br>Contacts NC                    | 2                                                                                                                                                                                                                                                                                                                                                    |
| Rated Operational Voltage                             | Main Circuit 1000 V                                                                                                                                                                                                                                                                                                                                  |
| Rated Frequency (f)                                   | Main Circuit 50/60 Hz                                                                                                                                                                                                                                                                                                                                |
| Conventional Free-air<br>Thermal Current ( $I_{th}$ ) | acc. to IEC 60947-4-1, Open Contactors q = 40 °C 350 A                                                                                                                                                                                                                                                                                               |
| Rated Operational Current<br>AC-1 ( $I_e$ )           | (1000 V) 40 °C 275 A<br>(1000 V) 60 °C 250 A<br>(1000 V) 70 °C 200 A<br>(690 V) 40 °C 350 A<br>(690 V) 60 °C 300 A<br>(690 V) 70 °C 240 A                                                                                                                                                                                                            |
| Rated Operational Current<br>AC-3 ( $I_e$ )           | (415 V) 60 °C 205 A<br>(440 V) 60 °C 205 A<br>(500 V) 60 °C 165 A<br>(690 V) 60 °C 165 A<br>(1000 V) 60 °C 100 A<br>(380 / 400 V) 60 °C 205 A<br>(220 / 230 / 240 V) 60 °C 205 A                                                                                                                                                                     |
| Rated Operational Power<br>AC-3 ( $P_e$ )             | (415 V) 110 kW<br>(440 V) 132 kW<br>(500 V) 110 kW<br>(690 V) 160 kW<br>(1000 V) 132 kW<br>(380 / 400 V) 110 kW<br>(220 / 230 / 240 V) 55 kW                                                                                                                                                                                                         |
| Rated Breaking Capacity<br>AC-3 acc. to IEC 60947-4-1 | 8 x $I_e$ AC-3                                                                                                                                                                                                                                                                                                                                       |
| Rated Making Capacity<br>AC-3 acc. to IEC 60947-4-1   | 10 x $I_e$ AC-3                                                                                                                                                                                                                                                                                                                                      |
| Short-Circuit Protective<br>Devices                   | gG Type Fuses 400 A                                                                                                                                                                                                                                                                                                                                  |
| Rated Short-time<br>Withstand Current ( $I_{cw}$ )    | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 1640 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 350 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 670 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 2050 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 947 A |
| Maximum Breaking<br>Capacity                          | cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 3500 A<br>cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 2500 A                                                                                                                                                                                                                       |
| Maximum Electrical<br>Switching Frequency             | (AC-1) 300 cycles per hour<br>(AC-2 / AC-4) 150 cycles per hour<br>(AC-3) 300 cycles per hour                                                                                                                                                                                                                                                        |
| Rated Operational Current                             | (110 V) 2 Poles in Series, 40 °C 275 A                                                                                                                                                                                                                                                                                                               |

|                                                  |                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC-1 ( $I_e$ )                                   | (220 V) 3 Poles in Series, 40 °C 275 A                                                                                                                                                                                                                                                                                                                                   |
| Rated Operational Current<br>DC-3 ( $I_e$ )      | (110 V) 2 Poles in Series, 40 °C 275 A<br>(220 V) 3 Poles in Series, 40 °C 275 A                                                                                                                                                                                                                                                                                         |
| Rated Operational Current<br>DC-5 ( $I_e$ )      | (110 V) 2 Poles in Series, 40 °C 275 A<br>(220 V) 3 Poles in Series, 40 °C 275 A                                                                                                                                                                                                                                                                                         |
| Rated Insulation Voltage<br>( $U_i$ )            | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V<br>acc. to UL/CSA 600 V                                                                                                                                                                                                                                                                                                |
| Rated Impulse Withstand<br>Voltage ( $U_{imp}$ ) | Main Circuit 8 kV                                                                                                                                                                                                                                                                                                                                                        |
| Mechanical Durability                            | 5 million                                                                                                                                                                                                                                                                                                                                                                |
| Maximum Mechanical<br>Switching Frequency        | 300 cycles per hour                                                                                                                                                                                                                                                                                                                                                      |
| Coil Operating Limits                            | (acc. to IEC 60947-4-1) 0.85 x $U_c$ Min. ... 1.1 x $U_c$ Max. (at $\theta \leq 70$ °C)                                                                                                                                                                                                                                                                                  |
| Rated Control Circuit<br>Voltage ( $U_c$ )       | 50 Hz 100 ... 250 V<br>60 Hz 100 ... 250 V<br>DC Operation 100 ... 250 V                                                                                                                                                                                                                                                                                                 |
| Coil Consumption                                 | Holding at Max. Rated Control Circuit Voltage 50 Hz 7 V·A<br>Holding at Max. Rated Control Circuit Voltage 60 Hz 7 V·A<br>Holding at Max. Rated Control Circuit Voltage DC 2.5 W<br>Pull-in at Max. Rated Control Circuit Voltage 50 Hz 220 V·A<br>Pull-in at Max. Rated Control Circuit Voltage 60 Hz 220 V·A<br>Pull-in at Max. Rated Control Circuit Voltage DC 190 W |
| Operate Time                                     | Between Coil De-energization and NO Contact Opening 37 ... 47 ms<br>Between Coil Energization and NO Contact Closing 25 ... 55 ms                                                                                                                                                                                                                                        |
| Connecting Capacity Main<br>Circuit              | Flexible 2 x 50 ... 95 mm²<br>Rigid Al-Cable 1 x 95 ... 185 mm²<br>Rigid Cu-Cable 1 x 6 ... 150 mm²                                                                                                                                                                                                                                                                      |
| Connecting Capacity<br>Auxiliary Circuit         | Flexible with Ferrule 1x 0.75 ... 2.5 mm²<br>Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm²<br>Flexible 2x0.75 ... 2.5 mm²<br>Solid 1 x 1 ... 4 mm²<br>Stranded 1 x 1 ... 4 mm²                                                                                                                                                                                     |
| Degree of Protection                             | acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20<br>acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP00                                                                                                                                                                                                                                             |
| Terminal Type                                    | Main Circuit: Bars                                                                                                                                                                                                                                                                                                                                                       |

## Technical UL/CSA

|                                     |                                                                                                                                                                                        |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum Operating<br>Voltage UL/CSA | Main Circuit 600 V                                                                                                                                                                     |
| General Use Rating<br>UL/CSA        | (600 V AC) 300 A                                                                                                                                                                       |
| Horsepower Rating<br>UL/CSA         | (200 V AC) Three Phase 60 hp<br>(208 V AC) Three Phase 60 hp<br>(220 ... 240 V AC) Three Phase 75 hp<br>(440 ... 480 V AC) Three Phase 150 hp<br>(550 ... 600 V AC) Three Phase 200 hp |

## Environmental

|                                           |                                                                                                                                                                                                                             |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient Air Temperature                   | Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 $U_c$ ) -25 ... +50 °C<br>Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 $U_c$ ) -40 ... +70 °C<br>Close to Contactor for Storage -40 ... +70 °C |
| Maximum Operating<br>Altitude Permissible | 3000 m                                                                                                                                                                                                                      |
| RoHS Status                               | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019                                                                                                                                                      |

## Certificates and Declarations (Document Number)

|                                    |                      |
|------------------------------------|----------------------|
| CB Certificate                     | SE-82315             |
| CCC Certificate                    | CQC_2014010304676685 |
| CQC Certificate                    | CQC2014010304676685  |
| cUL Certificate                    | 20121023-E36588      |
| Declaration of Conformity<br>- CCC | 2020980304001306     |
| Declaration of Conformity<br>- CE  | 2CMT2018-005695      |
| EAC Certificate                    | 1SFC101360D1101      |
| Instructions and Manuals           | 1SFC100008M0201      |
| RoHS Information                   | 2CMT2018-005695      |
| SUVA Certificate                   | 2CMT2019-005857      |

## Container Information

|                                   |               |
|-----------------------------------|---------------|
| Package Level 1 Units             | box 1 piece   |
| Package Level 1 Width             | 160 mm        |
| Package Level 1 Depth /<br>Length | 258 mm        |
| Package Level 1 Height            | 235 mm        |
| Package Level 1 Gross<br>Weight   | 3 kg          |
| Package Level 1 EAN               | 7320500541517 |

## Classifications

|                                       |                                           |
|---------------------------------------|-------------------------------------------|
| Object Classification Code            | Q                                         |
| ETIM 4                                | EC000066 - Magnet contactor, AC-switching |
| ETIM 5                                | EC000066 - Magnet contactor, AC-switching |
| ETIM 6                                | EC000066 - Power contactor, AC switching  |
| ETIM 7                                | EC000066 - Power contactor, AC switching  |
| eClass                                | V11.0 : 27371003                          |
| UNSPSC                                | 39121529                                  |
| IDEA Granular Category<br>Code (IGCC) | 4755 >> Contactors                        |
| E-Number (Finland)                    | 3709014                                   |

## Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors

