

Standard Motor Starters

Series 8220



www.stahl.de



10102E00

- > Enclosure with type of protection Ex d and terminal compartment enclosure with Ex e
- > Available standard motor controllers
 - Direct-on-line motor starters DOL
 - Star-delta starter combinations YD
 - Reversing starter combinations
- > Advantage
 - short delivery times



The standard motor starters are fitted into enclosures with type of protection "flameproof enclosure".
 The standard starters are supplied without main switch, main fuses and without control and monitoring devices. These parts can be fitted to order.

| Zone | ATEX / IECEx | | | | | |
|------------|--------------|---|---|----|----|----|
| | 0 | 1 | 2 | 20 | 21 | 22 |
| For use in | | x | x | | x | x |

E7

WebCode 8220A

Standard Motor Starters, Direct On-Line Motor Starters DOL Series 8220

Explosion Protection

Global (IECEX)

| | |
|------|--|
| Gas | IECEX PTB 06.0069 Ex de [ia/ib] IIC T6, T5, T4 |
| Dust | IECEX PTB 06.0069 Ex tD A21 IP6X T80°C, T95°C, T130°C |

Europe (ATEX)

| | |
|--------------|---|
| Gas and dust | PTB 02 ATEX 1109 Ex II 2 G Ex de [ia/ib] IIC T6, T5, T4 Ex II 2 D Ex tD A21 IP66 T80°C, T95°C, T130°C |
|--------------|---|

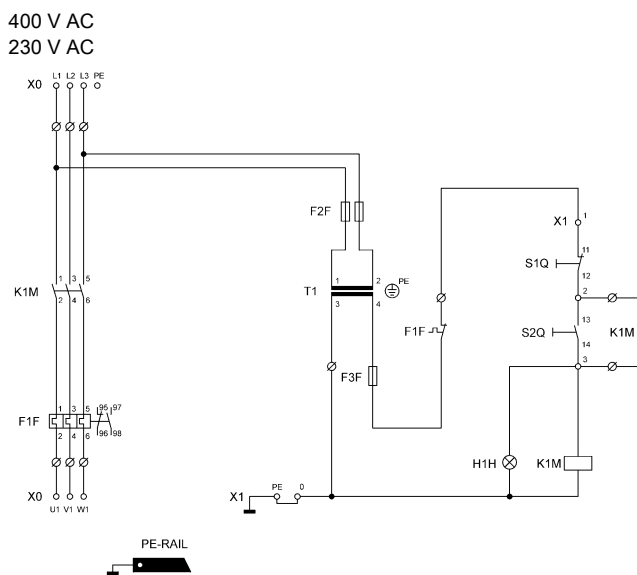
Certifications and certificates

| | |
|--------------|--|
| Certificates | IECEX, ATEX, Kazakhstan (TR), Korea (KCs), Russia (TR), Belarus (TR) |
|--------------|--|

Technical Data

Electrical data

| | |
|-----------------|----------|
| Rated voltage | 400 V AC |
| Control voltage | 230 V AC |
| Circuit diagram | |



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Ambient conditions

| | |
|---------------------|----------------|
| Ambient temperature | -20 ... +40 °C |
|---------------------|----------------|

Mechanical data

| | |
|----------------------|---|
| Degree of protection | IP55 (to order IP65) |
| Enclosure material | Sheet steel, cover: die-cast alloy / stainless steel |
| Colour | Enclosure: grey, RAL 7032, cover: dark grey, RAL 7022 |

Note

| | |
|------|---|
| Note | Description: Single contactor for connecting and disconnecting the motor circuits and ohmic consumers. With thermal overcurrent release, version with control transformer acc. to EN 60204. Specify on order if the nominal voltage has a different value than 400 V because the transformer must then be selected appropriately. |
|------|---|

Direct On-Line Motor Starters DOL Selection Table

| Switching capacity 400 V AC-3 | Ex d enclosure | Terminals | Cable entries bottom | | | Order number |
|----------------------------------|----------------|------------------------|------------------------|---------|-----------------|--------------------------|
| 5.5 kW | 8220/112 | 4 x 6 mm ² | 3 x 4 mm ² | 2 x M32 | 2 x M25 | 8220/5-SM-ES5,5kW400V-T |
| 7.5 kW | 8220/112 | 4 x 10 mm ² | 3 x 6 mm ² | 2 x M32 | 2 x M25 | 8220/5-SM-ES7,5kW400V-T |
| 11 kW | 8220/112 | 4 x 10 mm ² | 3 x 6 mm ² | 2 x M32 | 2 x M25 | 8220/5-SM-ES11kW400V-T |
| 15 kW | 8220/112 | 4 x 16 mm ² | 3 x 6 mm ² | 2 x M32 | 2 x M25 | 8220/5-SM-ES15kW400V-T |
| 18.5 kW | 8220/112 | 4 x 16 mm ² | 3 x 10 mm ² | 2 x M32 | 2 x M25 | 8220/5-SM-ES18,5kW400V-T |
| 22 kW | 8220/112 | 4 x 35 mm ² | 3 x 10 mm ² | 1 x M40 | 1 x M32 2 x M25 | 8220/5-SM-ES22kW400V-T |
| 30 kW | 8220/122 | 4 x 35 mm ² | 3 x 16 mm ² | 1 x M40 | 1 x M32 2 x M25 | 8220/5-SM-ES30kW400V-T |
| 37 kW | 8220/122 | 4 x 35 mm ² | 3 x 16 mm ² | 1 x M40 | 1 x M32 2 x M25 | 8220/5-SM-ES37kW400V-T |
| 45 kW | 8220/122 | 4 x 50 mm ² | 3 x 35 mm ² | 1 x M50 | 1 x M40 2 x M25 | 8220/5-SM-ES45kW400V-T |
| 55 kW | 8220/122 | 4 x 50 mm ² | 3 x 35 mm ² | 1 x M50 | 1 x M40 2 x M25 | 8220/5-SM-ES55kW400V-T |
| 75 kW | 8220/122 | 4 x 50 mm ² | 3 x 35 mm ² | 1 x M50 | 1 x M40 2 x M25 | 8220/5-SM-ES75kW400V-T |

Standard Motor Starters, Star-Delta Contactor Starters YD Series 8220



Explosion Protection

| | |
|-----------------------|--|
| Global (IECEX) | |
| Gas | IECEX PTB 06.0069 Ex de [ia/ib] IIC T6, T5, T4 |
| Dust | IECEX PTB 06.0069 Ex tD A21 IP6X T80°C, T95°C, T130°C |

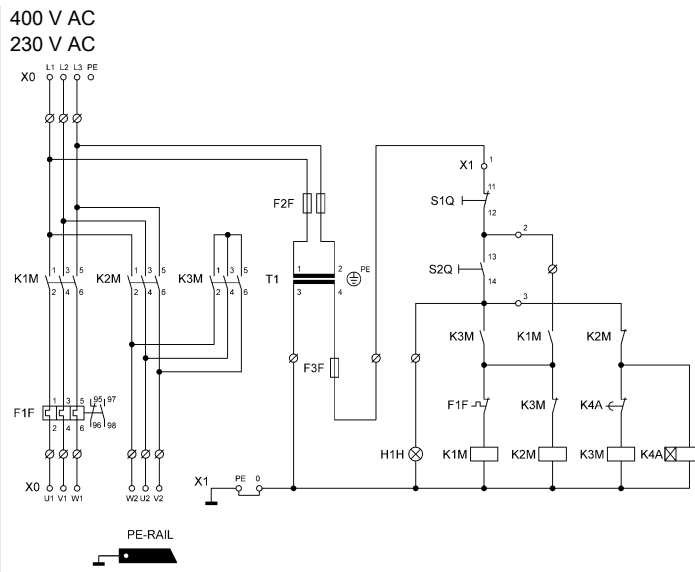
| | |
|----------------------|---|
| Europe (ATEX) | |
| Gas and dust | PTB 02 ATEX 1109 II 2 G Ex de [ia/ib] IIC T6, T5, T4 II 2 D Ex tD A21 IP66 T80°C, T95°C, T130°C |

| | |
|--|--|
| Certifications and certificates | |
| Certificates | IECEX, ATEX, Kazakhstan (TR), Korea (KCs), Russia (TR), Belarus (TR) |

Technical Data

Electrical data

Rated voltage
Control voltage
Circuit diagram



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| | |
|---------------------------|----------------|
| Ambient conditions | |
| Ambient temperature | -20 ... +40 °C |

| | |
|------------------------|---|
| Mechanical data | |
| Degree of protection | IP55 (to order IP65) |
| Enclosure material | Sheet steel, cover: die-cast alloy / stainless steel |
| Colour | Enclosure: grey, RAL 7032, cover: dark grey, RAL 7022 |

| | |
|-------------|---|
| Note | |
| Note | Description: Contactor combination for connecting and disconnecting the motor circuits and ohmic consumers. With thermal overcurrent release, version with control transformer acc. to EN 60204. Specify on order if the nominal voltage has a different value than 400 V because the transformer must then be selected appropriately. |

Star-Delta Starter Combinations YD Selection Table

| Switching capacity 400 V AC-3 | Ex d enclosure | Terminals | Cable entries bottom | | | Order number |
|----------------------------------|-------------------|-------------------------|-------------------------|---------|-----------------|--------------------------|
| 11 kW | 8220/122 | 4 x 6 mm ² | 6 x 4 mm ² | 3 x M32 | 2 x M25 | 8220/5-SL-SS11kW400V-T |
| 15 kW | 8220/122 | 4 x 6 mm ² | 6 x 4 mm ² | 3 x M32 | 2 x M25 | 8220/5-SL-SS15kW400V-T |
| 18.5 kW | 8220/122 | 4 x 6 mm ² | 6 x 4 mm ² | 3 x M32 | 2 x M25 | 8220/5-SL-SS18,5kW400V-T |
| 22 kW | 8220/122 | 4 x 10 mm ² | 6 x 6 mm ² | 3 x M32 | 2 x M25 | 8220/5-SL-SS22kW400V-T |
| 30 kW | 8220/172 | 4 x 16 mm ² | 6 x 6 mm ² | 3 x M40 | 2 x M25 | 8220/5-SL-SS30kW400V-T |
| 37 kW | 8220/172 | 4 x 35 mm ² | 6 x 10 mm ² | 3 x M40 | 2 x M25 | 8220/5-SL-SS37kW400V-T |
| 45 kW | 8220/132 | 4 x 35 mm ² | 6 x 16 mm ² | 1 x M50 | 2 x M40 2 x M25 | 8220/5-SL-SS45kW400V-T |
| 55 kW | 8220/132 | 4 x 50 mm ² | 6 x 35 mm ² | 1 x M50 | 2 x M40 2 x M25 | 8220/5-SL-SS55kW400V-T |
| 75 kW | 8220/132 | 4 x 50 mm ² | 6 x 35 mm ² | 1 x M50 | 2 x M40 2 x M25 | 8220/5-SL-SS75kW400V-T |
| 90 kW | 8220/133 | 4 x 95 mm ² | 6 x 50 mm ² | 1 x M63 | 2 x M40 2 x M25 | 8220/5-SL-SS90kW400V-T |
| 110 kW | 8220/133 | 4 x 150 mm ² | 6 x 95 mm ² | 1 x M63 | 2 x M50 2 x M25 | 8220/5-SL-SS110kW400V-T |
| 132 kW | 8220/133 | 4 x 150 mm ² | 6 x 95 mm ² | 1 x M63 | 2 x M50 2 x M25 | 8220/5-SL-SS132kW400V-T |
| 160 kW | 8220/196 | 4 x 240 mm ² | 6 x 150 mm ² | 3 x M63 | 2 x M25 | 8220/5-SL-SS160kW400V-T |
| 200 kW | 8220/196 | 4 x 240 mm ² | 6 x 150 mm ² | 3 x M63 | 2 x M25 | 8220/5-SL-SS200kW400V-T |

Standard Motor Starters, Reversing Starter Combinations

Series 8220

Explosion Protection

Global (IECEX)

| | |
|------|--|
| Gas | IECEX PTB 06.0069 Ex de [ia/ib] IIC T6, T5, T4 |
| Dust | IECEX PTB 06.0069 Ex tD A21 IP6X T80°C, T95°C, T130°C |

Europe (ATEX)

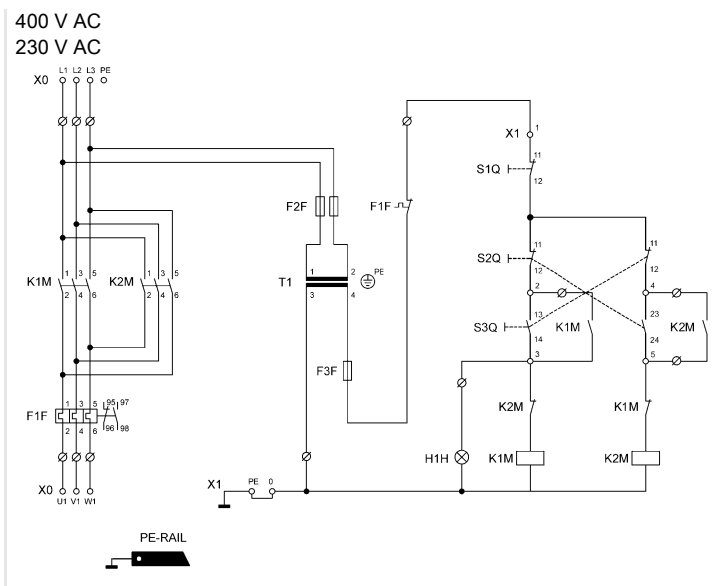
| | |
|--------------|---|
| Gas and dust | PTB 02 ATEX 1109 II 2 G Ex de [ia/ib] IIC T6, T5, T4 II 2 D Ex tD A21 IP66 T80°C, T95°C, T130°C |
|--------------|---|

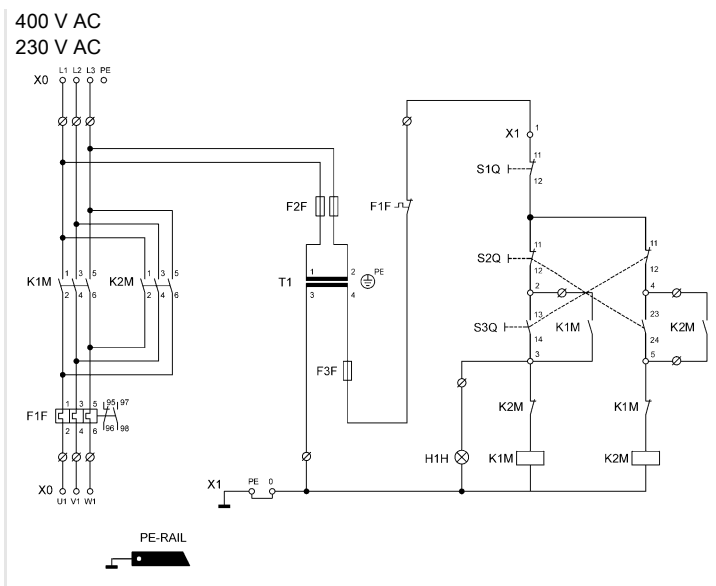
Certifications and certificates

| | |
|--------------|--|
| Certificates | IECEX, ATEX, Kazakhstan (TR), Korea (KCs), Russia (TR), Belarus (TR) |
|--------------|--|

Technical Data

Electrical data

| | |
|-----------------|---|
| Rated voltage | 400 V AC |
| Control voltage | 230 V AC |
| Circuit diagram |  |



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Ambient conditions

| | |
|---------------------|----------------|
| Ambient temperature | -20 ... +40 °C |
|---------------------|----------------|

Mechanical data

| | |
|----------------------|---|
| Degree of protection | IP55 (to order IP65) |
| Enclosure material | Sheet steel, cover: die-cast alloy / stainless steel |
| Colour | Enclosure: grey, RAL 7032, cover: dark grey, RAL 7022 |

Note

| | |
|------|--|
| Note | Description: Contactor combination for changing the phase sequence of the motor circuits. With thermal overcurrent release, version with control transformer acc. to EN 60204. Specify on order if the nominal voltage has a different value than 400 V because the transformer must then be selected appropriately. |
|------|--|

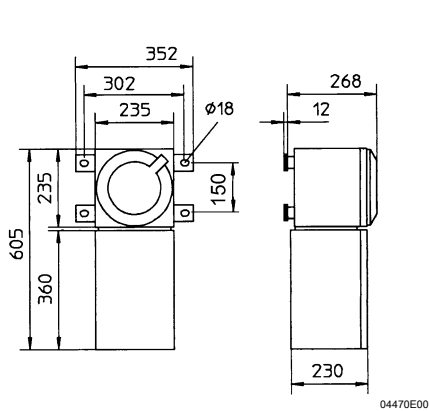
Reversing Starter Combinations Selection Table

| Switching capacity 400 V AC-3 | Ex d enclosure | Terminals | Cable entries bottom | | | Order number |
|----------------------------------|----------------|------------------------|------------------------|---------|-----------------|--------------------------|
| 5.5 kW | 8220/122 | 4 x 6 mm ² | 3 x 4 mm ² | 2 x M32 | 2 x M25 | 8220/5-SL-WS5,5kW400V-T |
| 7.5 kW | 8220/122 | 4 x 6 mm ² | 3 x 4 mm ² | 2 x M32 | 2 x M25 | 8220/5-SL-WS7,5kW400V-T |
| 11 kW | 8220/122 | 4 x 10 mm ² | 3 x 6 mm ² | 2 x M32 | 2 x M25 | 8220/5-SL-WS11kW400V-T |
| 15 kW | 8220/122 | 4 x 16 mm ² | 3 x 6 mm ² | 2 x M32 | 2 x M25 | 8220/5-SL-WS15kW400V-T |
| 18.5 kW | 8220/122 | 4 x 16 mm ² | 3 x 10 mm ² | 2 x M32 | 2 x M25 | 8220/5-SL-WS18,5kW400V-T |
| 22 kW | 8220/122 | 4 x 35 mm ² | 3 x 16 mm ² | 1 x M40 | 1 x M32 2 x M25 | 8220/5-SL-WS22kW400V-T |
| 30 kW | 8220/122 | 4 x 35 mm ² | 3 x 16 mm ² | 1 x M40 | 1 x M32 2 x M25 | 8220/5-SL-WS30kW400V-T |
| 37 kW | 8220/122 | 4 x 50 mm ² | 3 x 35 mm ² | 1 x M40 | 1 x M32 2 x M25 | 8220/5-SL-WS37kW400V-T |
| 45 kW | 8220/122 | 4 x 95 mm ² | 3 x 35 mm ² | 1 x M50 | 1 x M40 2 x M25 | 8220/5-SL-WS45kW400V-T |
| 55 kW | 8220/133 | 4 x 95 mm ² | 3 x 50 mm ² | 1 x M50 | 1 x M40 2 x M25 | 8220/5-SL-WS55kW400V-T |
| 75 kW | 8220/133 | 4 x 95 mm ² | 3 x 95 mm ² | 1 x M63 | 1 x M50 2 x M25 | 8220/5-SL-WS75kW400V-T |

Standard Motor Starters Series 8220

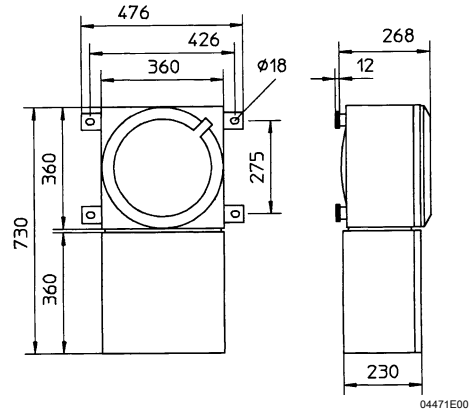


Dimensional Drawings (All Dimensions in mm) - Subject to Alterations



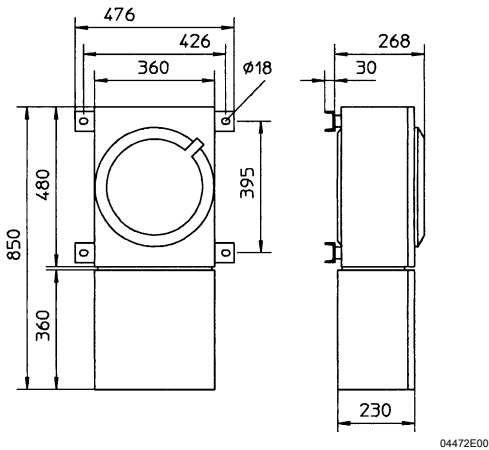
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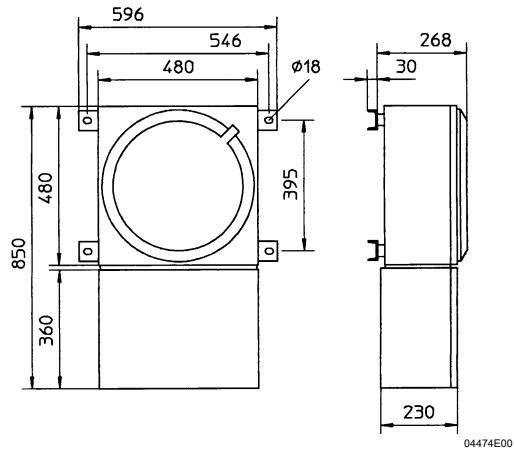
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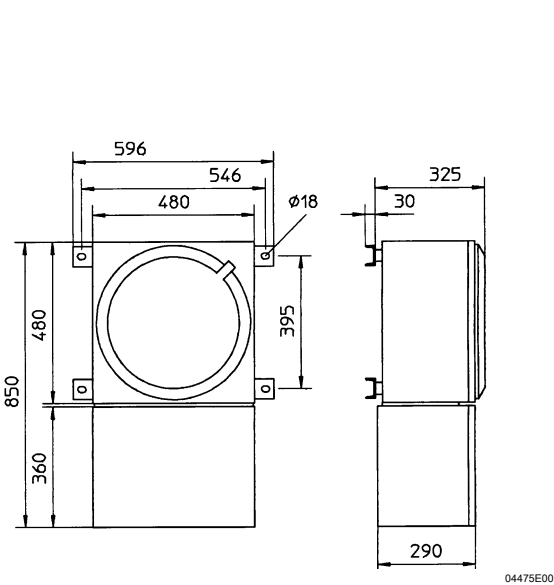
8220/172

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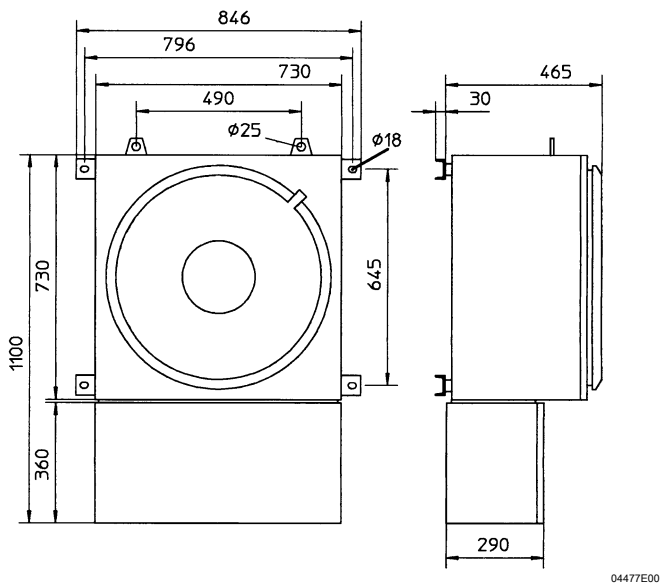
8220/132

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8220/133

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8220/196

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