



Automation specialists

Reference: 3RA1220-4AB25-0BB4

LOAD FEEDER FUSELESS REVERSING DUTY, AC 400 V, SIZESO, 11...16 A, DC 24V SCREW CONNECTION, TYPE OF COORDIN. 1, IQ = 50 KA

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| General technical data:                                                             |                       |
|-------------------------------------------------------------------------------------|-----------------------|
| product brand name                                                                  | SIRIUS                |
| Product designation                                                                 | non-fused load feeder |
| Design of the product                                                               | reversing starter     |
| Size of load feeder                                                                 | 50                    |
| Protection class IP on the front                                                    | IP20                  |
| Degree of pollution                                                                 | 3                     |
| Insulation voltage rated value                                                      | V 690                 |
| Installation altitude at height above sea level maximum                             | m 2 000               |
| Ambient temperature                                                                 |                       |
| during storage                                                                      | °C -55 +80            |
| during transport                                                                    | °C 7020               |
| during operation                                                                    | °C -20 +70            |
| Shock resistance                                                                    | 12.5g                 |
| Surge voltage resistance rated value                                                | kV 6                  |
| Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750 | Q                     |
| Equipment marking acc. to DIN EN 61346-2                                            | Q                     |
| Type of assignment                                                                  | 1                     |
| Mechanical service life (switching cycles) of contactor typical                     | 10 000 000            |

| Manufacturer's article number                                                  |     |                   |
|--------------------------------------------------------------------------------|-----|-------------------|
| of the supplied circuit-breakers                                               |     | 3RV10 21-4AA10    |
| of the supplied contactor                                                      |     | 3RT10 25-1BB40    |
| of the supplied link module                                                    |     | 3RA19 21-1BA00    |
| of the supplied RH assembly kit                                                | -   | 3RA19 23-1B       |
| Design of the switching contact                                                | -   | electromechanical |
| Type of the motor protection                                                   | -   | bimetal           |
| Adjustable pick-up value current of the current-<br>dependent overload release | А   | 11 16             |
| Communication/ Protocol:                                                       |     |                   |
| Product function Bus communication                                             |     | No                |
| Protocol is supported                                                          |     |                   |
| AS-interface protocol                                                          |     | No                |
| PROFIBUS DP protocol                                                           |     | No                |
| PROFINET protocol                                                              |     | No                |
| Main circuit:                                                                  |     |                   |
| Number of poles for main current circuit                                       |     | 3                 |
| Operating voltage at AC-3 rated value maximum                                  | V   | 690               |
| Operating current at AC-3 at 400 V rated value                                 | А   | 15.5              |
| Operating power at AC-3 at 400 V rated value                                   | kW  | 7.5               |
| No-load switching frequency                                                    | 1/s | 15                |
| Control circuit/ Control:                                                      |     |                   |
| Type of voltage of the control supply voltage                                  |     | DC                |
| Control supply voltage 1                                                       |     |                   |
| at DC                                                                          |     |                   |
| — rated value                                                                  | V   | 24                |
| Auxiliary circuit:                                                             |     |                   |
| Product extension Auxiliary switch                                             |     | Yes               |
| Number of NC contacts for auxiliary contacts                                   |     | 0                 |
| Number of NO contacts for auxiliary contacts                                   |     | 0                 |
| Number of CO contacts for auxiliary contacts                                   |     | 0                 |
| Inputs/ Outputs:                                                               |     |                   |
| Number of digital inputs                                                       |     | 0                 |
| Short-circuit:                                                                 |     |                   |
| Product function Short circuit protection                                      |     | Yes               |
| Design of short-circuit protection                                             |     | circuit-breakers  |
| Maximum short-circuit current breaking capacity (Icu) at 400 V rated value     | kA  | 50                |
|                                                                                |     |                   |

| Witd>         nm         100           Height         nm         220           Depth         mm         125           Required spacing         mm         0           with side-by-side mounting at the side         mm         0           or grounded parts         mm         10           = forwards         mm         10           = ackwards         mm         30           = upwards         mm         30           = at the side         mm         9           = forwards         mm         10           = ackwards         mm         30           = at the side         mm         9           = downwards         mm         10           = downwards         mm         30           = downwards         mm         30           Connections/ Terminals:         screw-type terminals           Stype of connectable conductor cross-sections         screw-type terminals           for main contacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Mounting position                                            | horizontal                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------|
| Height         mm         220           Depth         mm         125           Required spacing         mm         0           with side-by-side mounting at the side         mm         0           of or grounded parts         mm         10           - forwards         mm         0           - quwards         mm         0           - quwards         mm         30           - at the side         mm         9           - forwards         mm         10           - at the side         mm         9           - downds         mm         10           - downds         mm         10           - downwards         mm         9           - downwards         mm         30           - other the side         mm         30           Connections/ Terminals:         screw-type terminals           Type of connectable conductor cross-sections         screw-type terminals           For main contacts         -         -           - stranded         16 mm², 2x (1, 2.5 mm²), 2x (2.56 m²)           - finely stranded with core end processing         16 mm², 2x (1, 2.5 mm²), 2x (2.56 m²)           - finely stranded with core e                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Mounting type                                                | snap-on fastening on 35 mm standard rail   |
| Depth mm 125 Required spacing mm 125 Required spacing mm 0 For grounded parts For grounded parts For grounded parts For wards For art the side For wards For | Witd>                                                        | mm 100                                     |
| Required spacing mith side by-side mounting at the side mm 0  for grounded parts  for grounded parts  for wards  mm 10  Backwards  mm 30  at the side mm 9  for live parts  for wards  mm 10  Backwards  mm 0  at the side mm 30  connections/ Terminals:  Type of electrical connection for main current circuit  for main contacts  solid  stranded  mm 2  stranded  mm 2  at WG conductors for main contacts  certificate of suitability  General Product Approval  stranded  mm  mu  shipping Approval  mu  stranded   | Height                                                       | mm 220                                     |
| for grounded parts       mm       10         – forwards       mm       0         – upwards       mm       30         – at the side       mm       9         for live parts       -       -         – forwards       mm       10         – backwards       mm       9         – forwards       mm       10         – backwards       mm       0         – downwards       mm       0         – at the side       mm       30         Connections/ Terminals:       -       -         Type of connectable conductor cross-sections       -       -         for anin contacts       -       -       -         – solid       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 r       -         – stranded       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 r       -         – stranded       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 r       -         – tifkely stranded with core end processing       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 r         – tifkely conductors for main contacts       2 x (1 4 10)       -         Certificate of suitability       UL / CSA / CCC / GL / LRS / BV / DNV / PRS         Certificates/ approvals:       - <td>Depth</td> <td>mm 125</td>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Depth                                                        | mm 125                                     |
| for grounded parts  for grounded parts  for grounded parts  for upwards  mm 10  upwards mm 30  at the side mm 9  for live parts  for use in Declaration for main contacts  for use in Declaration for use in Declaration for shipping Approval  turnweltbestätig                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Required spacing                                             |                                            |
| – forwards       mm       10         – Backwards       mm       30         – upwards       mm       30         – at the side       mm       9         for live parts           – forwards       mm       10         – Backwards       mm       9         – downwards       mm       0         – downwards       mm       0         – at the side       mm       30         Connections/ Terminals:       mm       30         Type of electrical connection for main current circuit       screw-type terminals         Type of connectable conductor cross-sections       for main contacts         – solid       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 r         – solid       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 r         – finely stranded with core end processing       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 r         – finely stranded with core end processing       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 r         at AWG conductors for main contacts       2x (14 10)         Certificates / approvals:       E         General Product Approval       for use in Declaration of mazardous of solitoping Approval other         Shipping Approval       other <td>with side-by-side mounting at the side</td> <td>mm 0</td>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | with side-by-side mounting at the side                       | mm 0                                       |
| Backwards       mm       0         - upwards       mm       30         - at the side       mm       9         for live parts       mm       10         - forwards       mm       10         - Backwards       mm       9         - downwards       mm       0         - at the side       mm       30         Connections/ Terminals:       mm       30         Type of electrical connection for main current circuit       screw-type terminals         Type of connectable conductor cross-sections       for main contacts         - solid       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 n         - solid       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 n         - finely stranded with core end processing       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 n         - finely stranded with core end processing       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 n         - finely stranded with core end processing       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 n         - at WG conductors for main contacts       2 x (14 10)         Certificates / approvals:       UL / CSA / CCC / GL / LRS / BV / DNV / PRS         General Product Approval       for use in hazardous of for main son Conformity         Shipping Approval       other                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | for grounded parts                                           |                                            |
| - upwards       mm       30         - at the side       mm       9         for live parts       mm       10         - forwards       mm       10         - Backwards       mm       9         - downwards       mm       0         - at the side       mm       30         Connections/ Terminals:       mm       30         Type of electrical connection for main current circuit       screw-type terminals         Type of connectable conductor cross-sections       for main contacts         - solid       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 r         - solid       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 r         - stranded       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 r         - finely stranded with core end processing       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 r         at AWG conductors for main contacts       2 x (14 10)         Certificates of suitability       UL / CSA / CCC / GL / LRS / BV / DNV / PRS         Certificates/ approvals:       for use in hazardous of for main shipping Approval other         Shipping Approval       other         Umweltbestätig       Uther                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | — forwards                                                   | mm 10                                      |
| - at the side       mm       9         for live parts       mm       10         - forwards       mm       10         - Backwards       mm       9         - downwards       mm       0         - at the side       mm       30         Connections/ Terminals:       Type of electrical connection for main current circuit       screw-type terminals         Type of connectable conductor cross-sections       for main contacts       -         - solid       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 n         - stranded       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 n         - stranded       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 n         - finely stranded with core end processing       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 n         at AWG conductors for main contacts       2x (14 10)         Certificate of suitability       UL / CSA / CCC / GL / LRS / BV / DNV / PRS         Certificates/ approvals:       For use in Declaration hazardous of Shipping Approval of Shipping Approval         Shipping Approval       other                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | — Backwards                                                  | mm 0                                       |
| for live parts mm 10 mm 20 mm 9 downwards mm 0 at the side mm 30 Connections/ Terminals: Type of electrical connection for main current circuit screw-type terminals Type of connectable conductor cross-sections for main contacts for use in Declaration hazardous for locations for use in Declaration hazardous for locations for locations for use in Declaration hazardous for locations for l | — upwards                                                    | mm 30                                      |
| - forwards       mm       10         - Backwards       mm       9         - downwards       mm       0         - at the side       mm       30         Connections/ Terminals:       Type of electrical connection for main current circuit       screw-type terminals         Type of connectable conductor cross-sections       for main contacts       -         - solid       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 m²), 2x (2.5 6 m²), 2x (2.5 6 m²), 2x (2.5 6 m²), 2x (1 2.5 mm²), 2x (2.5 6 m²), 2x (1 2.5 m²), 2x (2.5 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | — at the side                                                | mm 9                                       |
| - Backwards       mm       9         - downwards       mm       0         - at the side       mm       30         Connections/ Terminals:       Type of electrical connection for main current circuit       screw-type terminals         Type of connectable conductor cross-sections       for main contacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | for live parts                                               |                                            |
| - downwards     mm     0       - a the side     mm     30       Connections/ Terminals:     Type of electrical connection for main current circuit     screw-type terminals       Type of connectable conductor cross-sections     for main contacts     1       - solid     1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 m²), 2x (14 10)       Certificate of suitability     UL / CSA / CCC / GL / LRS / BV / DNV / PRS       Certificates of suitability     UL / CSA / CCC / GL / LRS / BV / DNV / PRS       Certificates / approvals:     For use in Declaration hazardous of Shipping Approval of sciences       Shipping Approval     other                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | — forwards                                                   | mm 10                                      |
| — at the side       mm       30         Connections/ Terminals:       Type of electrical connection for main current circuit       screw-type terminals         Type of connectable conductor cross-sections       for main contacts       for main contacts         — solid       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 m²), 2x (2.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | — Backwards                                                  | mm 9                                       |
| Connections/ Terminals:         Type of electrical connection for main current circuit       screw-type terminals         Type of connectable conductor cross-sections       for main contacts         - solid       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 m², 2x (1 10)         Certificate of suitability       UL / CSA / CCC / GL / LRS / BV / DNV / PRS         Certificates/ approvals:       For use in Declaration of Shipping Approval other         Shipping Approval       other                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | — downwards                                                  | mm 0                                       |
| Type of electrical connection for main current circuit       screw-type terminals         Type of connectable conductor cross-sections       for main contacts         - solid       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 n         - stranded       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 n         - finely stranded with core end processing       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 n         at AWG conductors for main contacts       2x (14 10)         Certificate of suitability       UL / CSA / CCC / GL / LRS / BV / DNV / PRS         Certificates/ approvals:       For use in hazardous of conformity       Shipping Approval         Shipping Approval       other       Umweltbestätig                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | — at the side                                                | mm 30                                      |
| Type of connectable conductor cross-sections         for main contacts         — solid       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 m²), 2x (2.5 6 m²), 2x (2.5 6 m²), 2x (2.5 6 m²), 2x (1 2.5 mm²), 2x (2.5 6 m²), 2x (1 2.5 m²), 2x (2.5 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Connections/ Terminals:                                      |                                            |
| for main contacts       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 m²)         - solid       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 m²)         - stranded       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 m²)         - finely stranded with core end processing       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 m²)         at AWG conductors for main contacts       2x (14 10)         Certificate of suitability       UL / CSA / CCC / GL / LRS / BV / DNV / PRS         Certificates/ approvals:       For use in Declaration hazardous of Shipping Appro locations         Shipping Approval       other         Umweltbestätig       Umweltbestätig                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Type of electrical connection for main current circuit       | screw-type terminals                       |
| - solid       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 m         - stranded       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 m         - finely stranded with core end processing       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 m         at AWG conductors for main contacts       2x (14 10)         Certificate of suitability       UL / CSA / CCC / GL / LRS / BV / DNV / PRS         Certificates/ approvals:       For use in Declaration hazardous of shipping Approval         Shipping Approval       other         Umweltbestätig       Umweltbestätig                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Type of connectable conductor cross-sections                 |                                            |
| stranded       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 m²)         finely stranded with core end processing       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 m²)         at AWG conductors for main contacts       2x (14 10)         Certificate of suitability       UL / CSA / CCC / GL / LRS / BV / DNV / PRS         Certificates/ approvals:       For use in hazardous of shipping Approval         Shipping Approval       other         Umweltbestätig       Umweltbestätig                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | for main contacts                                            |                                            |
| finely stranded with core end processing       1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 m²)         at AWG conductors for main contacts       2x (14 10)         Certificate of suitability       UL / CSA / CCC / GL / LRS / BV / DNV / PRS         Certificates/ approvals:       For use in Declaration hazardous of Shipping Approval conformity         Shipping Approval       other         Umweltbestätig       Umweltbestätig                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | — solid                                                      | 1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 mm      |
| at AWG conductors for main contacts 2x (14 10)<br>Certificate of suitability UL / CSA / CCC / GL / LRS / BV / DNV / PRS<br>Certificates/ approvals:<br>General Product Approval For use in Declaration<br>hazardous of Shipping Approv<br>locations Conformity other<br>Umweltbestätig                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | – stranded                                                   | 1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 mm      |
| Certificate of suitability       UL / CSA / CCC / GL / LRS / BV / DNV / PRS         Certificates/ approvals:       For use in Declaration hazardous of Shipping Approvious Conformity         Shipping Approval       other         Unweltbestätig       Unweltbestätig                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <ul> <li>finely stranded with core end processing</li> </ul> | 1 6 mm², 2x (1 2.5 mm²), 2x (2.5 6 mm      |
| Certificates/ approvals:<br>General Product Approval<br>Shipping Approval<br>Shipping Approval<br>Other<br>Umweltbestätig                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | at AWG conductors for main contacts                          | 2x (14 10)                                 |
| General Product Approval       For use in hazardous locations       Declaration of conformity       Shipping Approval         Shipping Approval       other         Umweltbestätig       Umweltbestätig                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Certificate of suitability                                   | UL / CSA / CCC / GL / LRS / BV / DNV / PRS |
| General Product Approval       hazardous locations       of Conformity       Shipping Approval         Shipping Approval       other         Umweltbestätig       umweltbestätig                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Certificates/ approvals:                                     |                                            |
| Umweltbestätig                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | General Product Approval                                     | hazardous of Shipping Approval             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Shipping Approval                                            | other                                      |
| other                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                              | Umweltbestätigun                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | other                                                        |                                            |