

## Overview

## Single-phase transformers



4AM



4AT



4BT



4AX24

4AT for supply  
of medical  
rooms

4FK



4CH

| Versions                                                                              | Rated power<br>kVA                   | Rated input voltage<br>V AC                                                     | Rated output voltage<br>V AC                                                    | Safety class | Page  |
|---------------------------------------------------------------------------------------|--------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------|-------|
| <b>4AM, 4AT safety, isolating, control and mains transformers</b>                     |                                      |                                                                                 |                                                                                 |              |       |
| <b>4AM safety (mains transformers) and control transformers</b>                       |                                      |                                                                                 |                                                                                 |              |       |
| With one input voltage                                                                | 0.063 ... 1.0                        | 230 ± 5 %; 400 ± 5 %;<br>440 ± 5 %; 500 ± 5 %                                   | 24; 42                                                                          | I            | 10/4  |
| For European voltages                                                                 | 0.063 ... 1.0                        | 400/230 ± 15 V                                                                  | 24; 42                                                                          | I            | 10/4  |
| In multi-voltage version                                                              | 0.063 ... 1.0                        | 550 ... 208; 600 ... 230                                                        | 24; 42                                                                          | I            | 10/4  |
| <b>4AM safety transformers (mains transformers)</b>                                   |                                      |                                                                                 |                                                                                 |              |       |
| With one input voltage                                                                | 0.025 ... 0.04                       | 230 ± 5 %; 400 ± 5 %;<br>440 ± 5 %; 500 ± 5 %                                   | 24; 42                                                                          | I            | 10/4  |
| <b>4AM, 4AT isolating, control and mains transformers</b>                             |                                      |                                                                                 |                                                                                 |              |       |
| 4AM and 4AT with one input voltage                                                    | 4AM: 0.063 ... 2.5;<br>4AT: 4 ... 10 | 230 ± 5 %; 400 ± 5 %;<br>440 ± 5 %; 500 ± 5 %                                   | 110; 2 × 115; 230                                                               | I            | 10/4  |
| 4AM and 4AT with one input voltage,<br>without <b>cVus</b>                            | 4AM: 0.063 ... 2.5;<br>4AT: 4 ... 10 | 660 ± 5 %; 690 ± 5 %                                                            | 230                                                                             | I            | 10/4  |
| 4AM in European voltage design                                                        | 0.063 ... 2.5                        | 400/230 ± 15 V                                                                  | 2 × 115                                                                         | I            | 10/4  |
| 4AM and 4AT in multi-voltage version                                                  | 4AM: 0.063 ... 2.5;<br>4AT: 4 ... 10 | 550 ... 208; 600 ... 230                                                        | 2 × 115                                                                         | I            | 10/4  |
| <b>4AM isolating and mains transformers</b>                                           |                                      |                                                                                 |                                                                                 |              |       |
| 4AM with one input voltage                                                            | 0.025 ... 0.04                       | 230 ± 5 %; 400 ± 5 %;<br>440 ± 5 %; 500 ± 5 %                                   | 110; 230                                                                        | I            | 10/4  |
| 4AM and 4AT with one input voltage,<br>without <b>cVus</b>                            | 0.025 ... 0.04                       | 660 ± 5 %; 690 ± 5 %                                                            | 230                                                                             | I            | 10/4  |
| <b>4AM, 4AT transformers with selectable voltages</b>                                 |                                      |                                                                                 |                                                                                 |              |       |
| 4AM and 4AT safety, isolating, control and<br>mains transformers and autotransformers | 4AM: 0.025 ... 2.5;<br>4AT: 4 ... 16 | Selectable;<br>4AM: 12 ... 690 <sup>1)</sup> ;<br>4AT: 24 ... 690 <sup>1)</sup> | Selectable;<br>4AM: 12 ... 690 <sup>1)</sup> ;<br>4AT: 24 ... 690 <sup>1)</sup> | I<br>I       | 10/4  |
| <b>4BT power transformers</b>                                                         |                                      |                                                                                 |                                                                                 |              |       |
| 4BT transformers with selectable voltages                                             | 18 ... 250                           | Selectable; 100 ... 1000 <sup>1)</sup>                                          | Selectable; 100 ... 1000 <sup>1)</sup>                                          | I            | 10/14 |
| <b>4AX22, 4AX23 safety transformers</b>                                               |                                      |                                                                                 |                                                                                 |              |       |
| Resin-enclosed                                                                        | 0.1 ... 1                            | 230                                                                             | 24; 42                                                                          | II           | 10/17 |
| <b>4AX24 isolating transformers</b>                                                   |                                      |                                                                                 |                                                                                 |              |       |
| Resin-enclosed                                                                        | 0.16 ... 2.5                         | 230                                                                             | 230                                                                             | II           | 10/18 |
| <b>4AT isolating transformers</b>                                                     |                                      |                                                                                 |                                                                                 |              |       |
| For supply of medical premises                                                        | 2.5 ... 8                            | 230                                                                             | 230-115                                                                         | I            | 10/19 |
| <b>4FL, 4FK voltage regulators</b>                                                    |                                      |                                                                                 |                                                                                 |              |       |
| 4FL transformer-type                                                                  | 2.2 ... 63                           | 230                                                                             | 230                                                                             | I            | 10/20 |
| 4FK magnetic-type                                                                     | 0.12 ... 0.75                        | 230/selectable 110 ... 500                                                      | 230/selectable 110 ... 500                                                      | I            | 10/21 |
|                                                                                       | 1 ... 2.5                            | 230/selectable 110 ... 500                                                      | 230/selectable 110 ... 500                                                      | I            | 10/21 |
|                                                                                       | 3.15 ... 10                          | 400/selectable 110 ... 500                                                      | 230/selectable 110 ... 500                                                      | I            | 10/21 |
| <b>4CH, 4CP variable-ratio transformers</b>                                           |                                      |                                                                                 |                                                                                 |              |       |
| 4CH toroidal-core variable-ratio<br>transformers                                      | 0.28 ... 3.22                        | 400                                                                             | 0 ... 230 stepless                                                              | I            | 2)    |
|                                                                                       | 0.69 ... 3.22                        | 230                                                                             | 0 ... 230 stepless                                                              | I            | 2)    |
| 4CP pillar-type variable-ratio transformers                                           | 13.8 ... 207                         | 400                                                                             | 0 ... 400 stepless                                                              | I            | 2)    |

<sup>1)</sup> **cVus** max. 600 V.

<sup>2)</sup> For more information see the interactive catalog CA 01 and A&D Mall.

## Three-phase transformers



4AP20



4AU



4BU



4FL

| Versions                                                                           | Rated power<br>kVA                   | Rated input voltage<br>V AC                                                                           | Rated output voltage<br>V AC                                                    | Safety class | Page  |
|------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------|-------|
| <b>4AP, 4AU safety, isolating, control and mains transformers</b>                  |                                      |                                                                                                       |                                                                                 |              |       |
| <b>4AP, 4AU isolating, control and mains transformers</b>                          |                                      |                                                                                                       |                                                                                 |              |       |
| 4AP and 4AU in two-voltage version                                                 | 0.63 ... 16                          | Y 500-400 /Δ 289-230                                                                                  | Y 400/Δ 230                                                                     | I            | 10/31 |
| 4AP and 4AU in multi-voltage version                                               | 0.63 ... 16                          | Y 520 ... 360 /Δ 300 ... 208                                                                          | Y 400/Δ 230                                                                     | I            | 10/31 |
| <b>4AP isolating and mains transformers</b>                                        |                                      |                                                                                                       |                                                                                 |              |       |
| In two-voltage version                                                             | 0.16 ... 0.4                         | Y 500-400 /Δ 289-230                                                                                  | Y 400/Δ 230                                                                     | I            | 10/31 |
| <b>4AP, 4AU transformers with selectable voltages</b>                              |                                      |                                                                                                       |                                                                                 |              |       |
| 4AP and 4AU safety, isolating, control and mains transformers and autotransformers | 4AP: 0.16 ... 5;<br>4AU: 6.3 ... 16  | Selectable;<br>4AP: 12 ... 690 <sup>1)</sup> ,<br>4AU: 24 ... 690 <sup>1)</sup>                       | Selectable;<br>4AP: 12 ... 690 <sup>1)</sup> ,<br>4AU: 24 ... 690 <sup>1)</sup> | I<br>I       | 10/31 |
| <b>4BU power transformers</b>                                                      |                                      |                                                                                                       |                                                                                 |              |       |
| 4BU matching transformers<br>With one input voltage                                | 18 ... 180 <sup>2)</sup>             | Δ 400, 400 ± 5 %, 440, 440 ± 5 %, 480, 480 ± 5 %/<br>Y 400, 400 ± 5 %, 440, 440 ± 5 %, 480, 480 ± 5 % | Y 208, 400                                                                      | I            | 10/38 |
| 4BU matching transformers<br>With <b>cFLus</b> approval<br>With one input voltage  | 18 ... 180 <sup>2)</sup>             | Δ 400, 400 ± 5 %, 440, 440 ± 5 %, 480, 480 ± 5 %/<br>Y 400, 400 ± 5 %, 440, 440 ± 5 %, 480, 480 ± 5 % | Y 208, 400                                                                      | I            | 10/38 |
| 4BU transformers<br>With selectable voltages                                       | 18 ... 400                           | Selectable 100 ... 1000 <sup>1)</sup>                                                                 | Selectable 100 ... 1000 <sup>1)</sup>                                           | I            | 10/38 |
| <b>4AP, 4AU autotransformers</b>                                                   |                                      |                                                                                                       |                                                                                 |              |       |
| For matching purposes to<br>EN 61558-2-13                                          | 4AP: 5 ... 22.5;<br>4AU: 12.5 ... 50 | 4AP, 4AU: 480 ... 380<br>4AP, 4AU: 480 ... 400 (380) <sup>3)</sup>                                    | 4AP, 4AU: 400<br>4AP, 4AU: 230 (220) <sup>3)</sup>                              | I<br>I       | 10/42 |
| <b>4FL voltage regulators</b>                                                      |                                      |                                                                                                       |                                                                                 |              |       |
| 4FL transformer-type                                                               | 6.8 ... 190                          | 400                                                                                                   | 400                                                                             | I            | 10/43 |
| <b>4CJ, 4CQ variable-ratio transformers</b>                                        |                                      |                                                                                                       |                                                                                 |              |       |
| 4CJ toroidal-core variable-ratio<br>transformers                                   | 2.07 ... 9.66                        | 400                                                                                                   | 0 ... 400 stepless                                                              | I            | 4)    |
| 4CQ pillar-type variable-ratio transformers                                        | 16 ... 240                           | 400                                                                                                   | 0 ... 400 stepless                                                              | I            | 4)    |

1) **cFLus** max. 600 V.

2) For other ratings up to 400 kVA see the interactive catalog CA 01 and A&D Mail.

3) Operating with 3 AC 380 V at the input terminals results in an output voltage of 3 AC 220 V.

4) For more information see the interactive catalog CA 01 and A&D Mail.