

WEEE SOFT STARTER DISPOSAL INSTRUCTIONS

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|------------------------|---------------|------------------------|----------------------|
| Product Note #: | 710-17785-00C | Product series: | CSX/CSXi, EMX3, EMX4 |
| Date of issue: | 26/06/2018 | Related NCR: | n/a |

1 Overview

This document is intended for use as guidelines by treatment operators, such as dismantlers or recyclers, when processing end-of-life CSX/CSXi, EMX3 and EMX4 soft starters, in compliance with Waste Electrical and Electronic Equipment (WEEE) requirements: [Directive 2012/19/EU](#) of the European Parliament and of the Council of 4 July 2012 on Waste Electrical and Electronic Equipment.

CSX Series (007 ~ 110 kW)



EMX3 Series (21 A ~1600 A)



EMX4 Series (21 A ~1600 A)



2 Disposal Instructions

The tables in the following sections (CSX Series, EMX3 Series, EMX4 Series) list the component types that can be found in these products and classify the components according to three disposal categories: depollution, dismantling and shredding. Below are general disposal instructions on how to handle components listed under each category.

Depollution

Components listed for depollution are considered hazardous components. These need to be handled carefully to prevent pollution and minimise emissions.

Dismantling

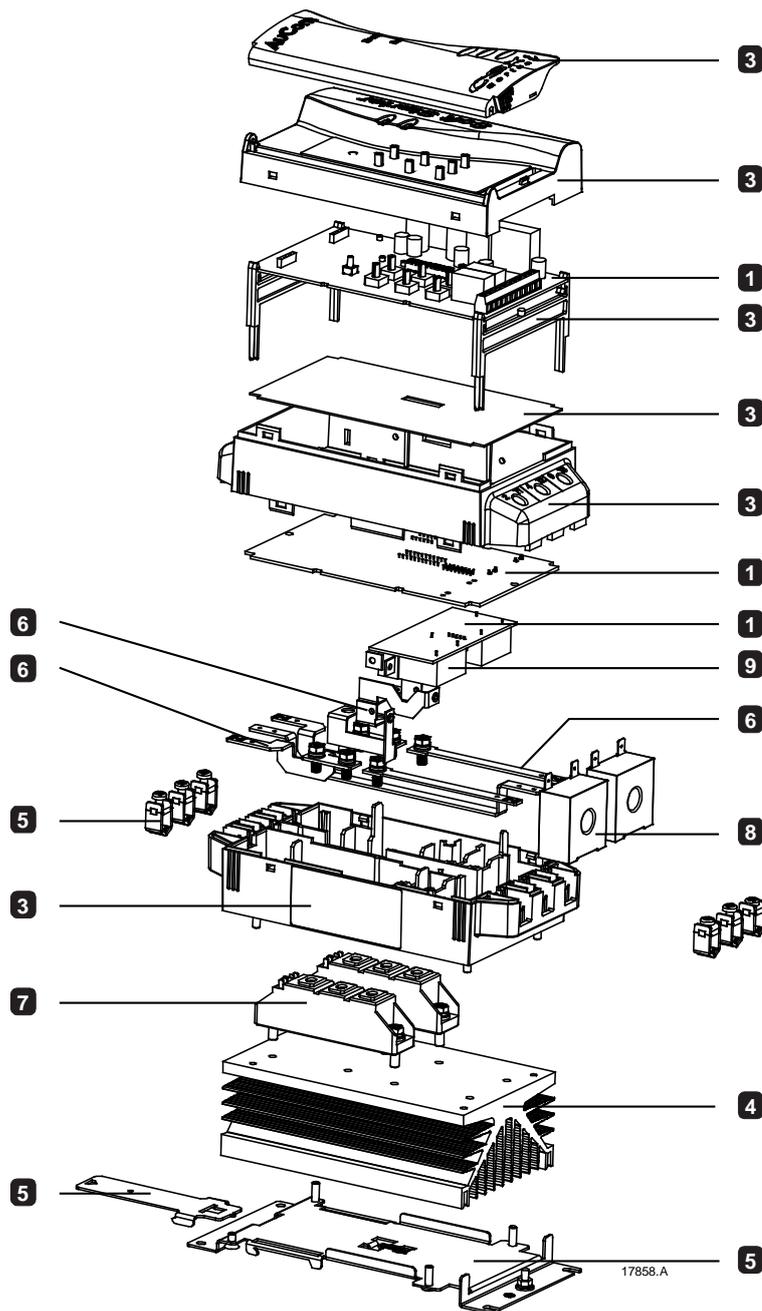
Dismantle and separate all components and materials listed for dismantling in order to optimise their recovery (eg repair, recycling, and energy recovery).

Shredding

Process all components listed for shredding for recovery as secondary raw materials.

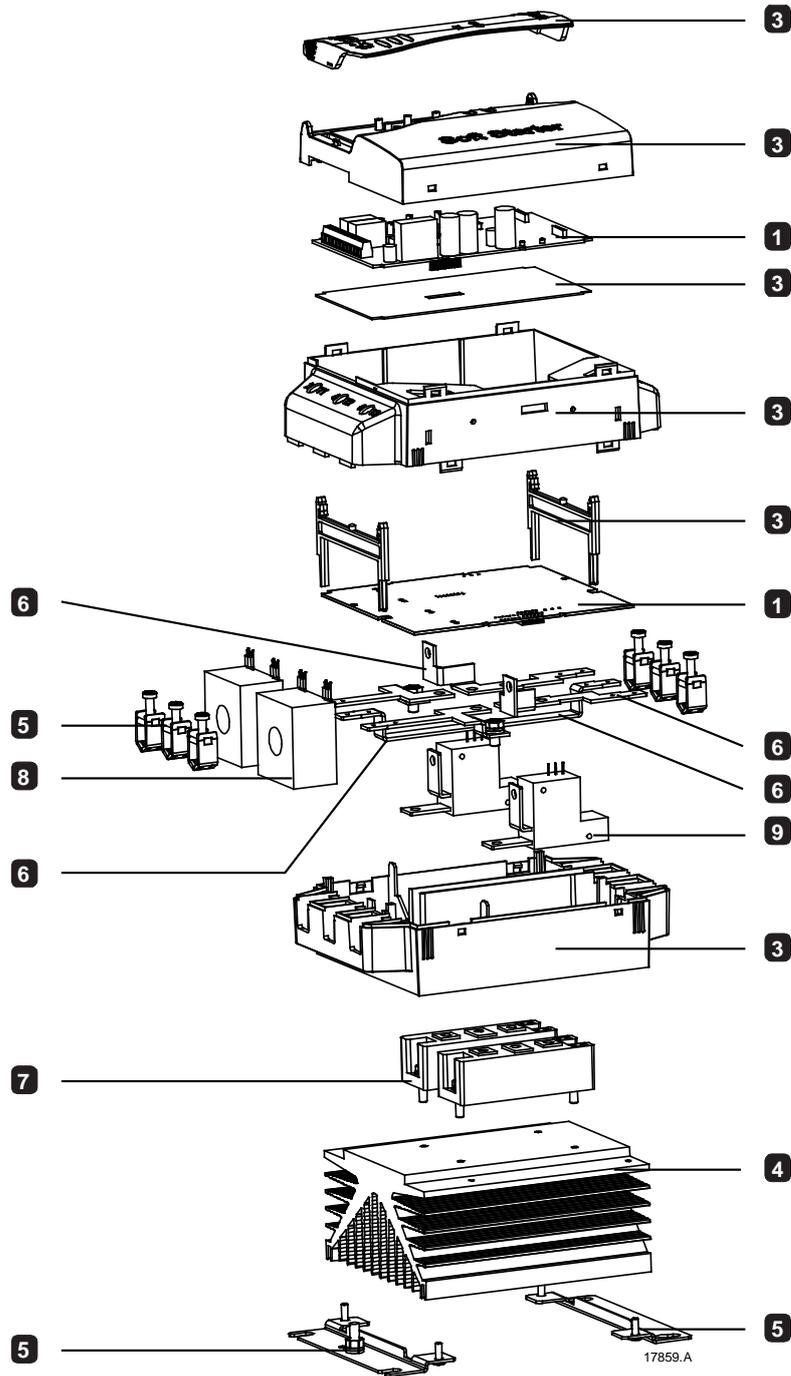
2.1 CSX Series

CSX/CSXi (7 ~ 30 kW)



| Type of component | # | Description | Total mass per type (kg) |
|-----------------------------------|---|--|--------------------------|
| Components listed for depollution | 1 | PCBs | 0.164 |
| | 2 | Cables and connectors (not shown on drawing) | 0.014 |
| | 3 | Plastic parts | 0.41 |
| Components listed for dismantling | 4 | Aluminium | 0.915 |
| | 5 | Steel | 0.23 |
| | 6 | Copper | 0.092 |
| Components listed for shredding | 7 | SCRs | 0.188 |
| | 8 | CTs | 0.12 |
| | 9 | Relays | 0.062 |

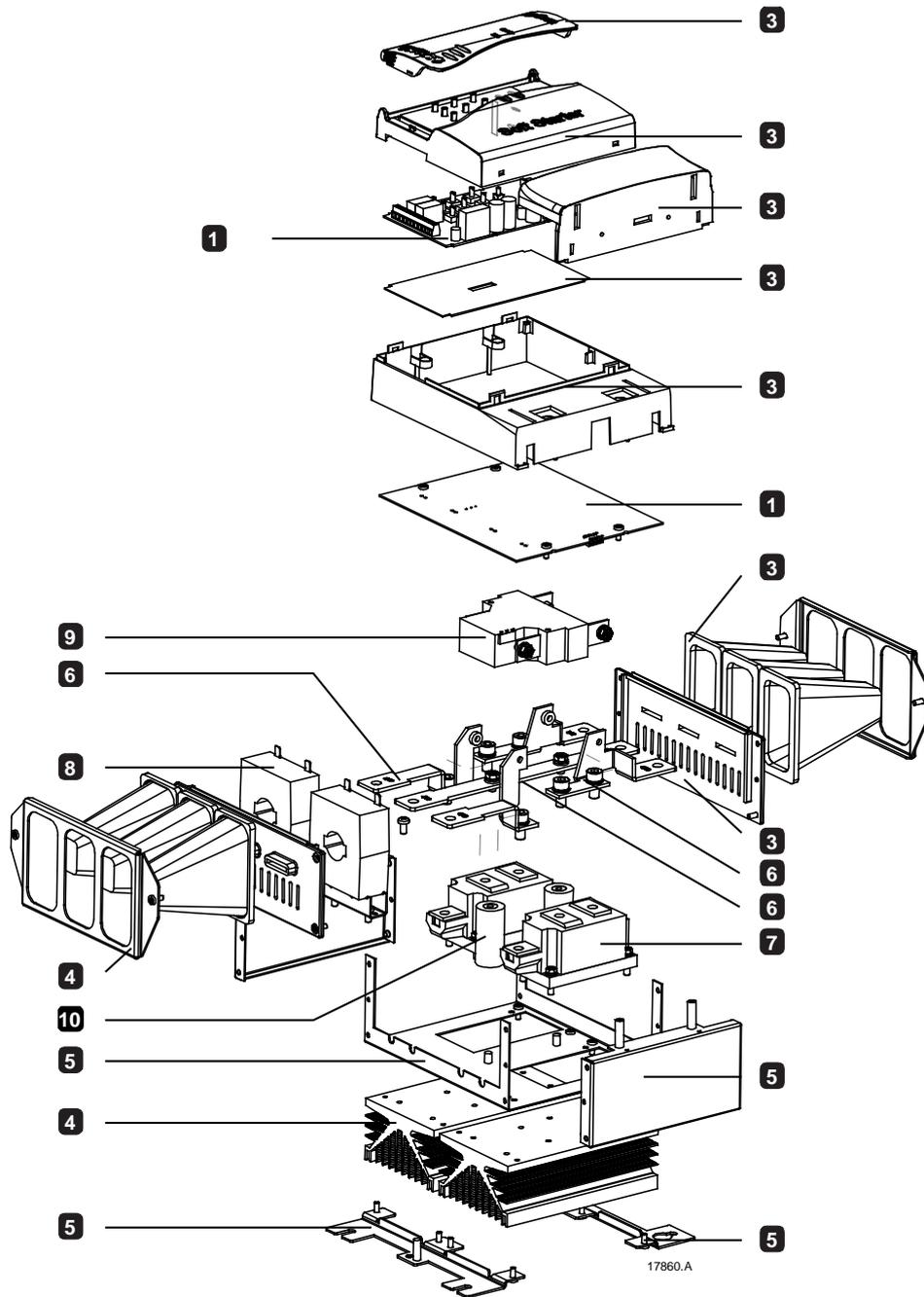
CSX/CSXi (37 ~ 55 kW)



| Type of component | # | Description | Total mass per type (kg) |
|-----------------------------------|---|--|--------------------------|
| Components listed for depollution | 1 | PCBs | 0.176 |
| | 2 | Cables and connectors (not shown on drawing) | 0.014 |
| | 3 | Plastic parts | 0.596 |
| Components listed for dismantling | 4 | Aluminium | 2.02 |
| | 5 | Steel | 0.228 |
| | 6 | Copper | 0.188 |
| Components listed for shredding | 7 | SCRs | 0.328 |
| | 8 | CTs | 0.316 |
| | 9 | Relays | 0.16 |



CSX/CSXi (75 ~ 110 kW)

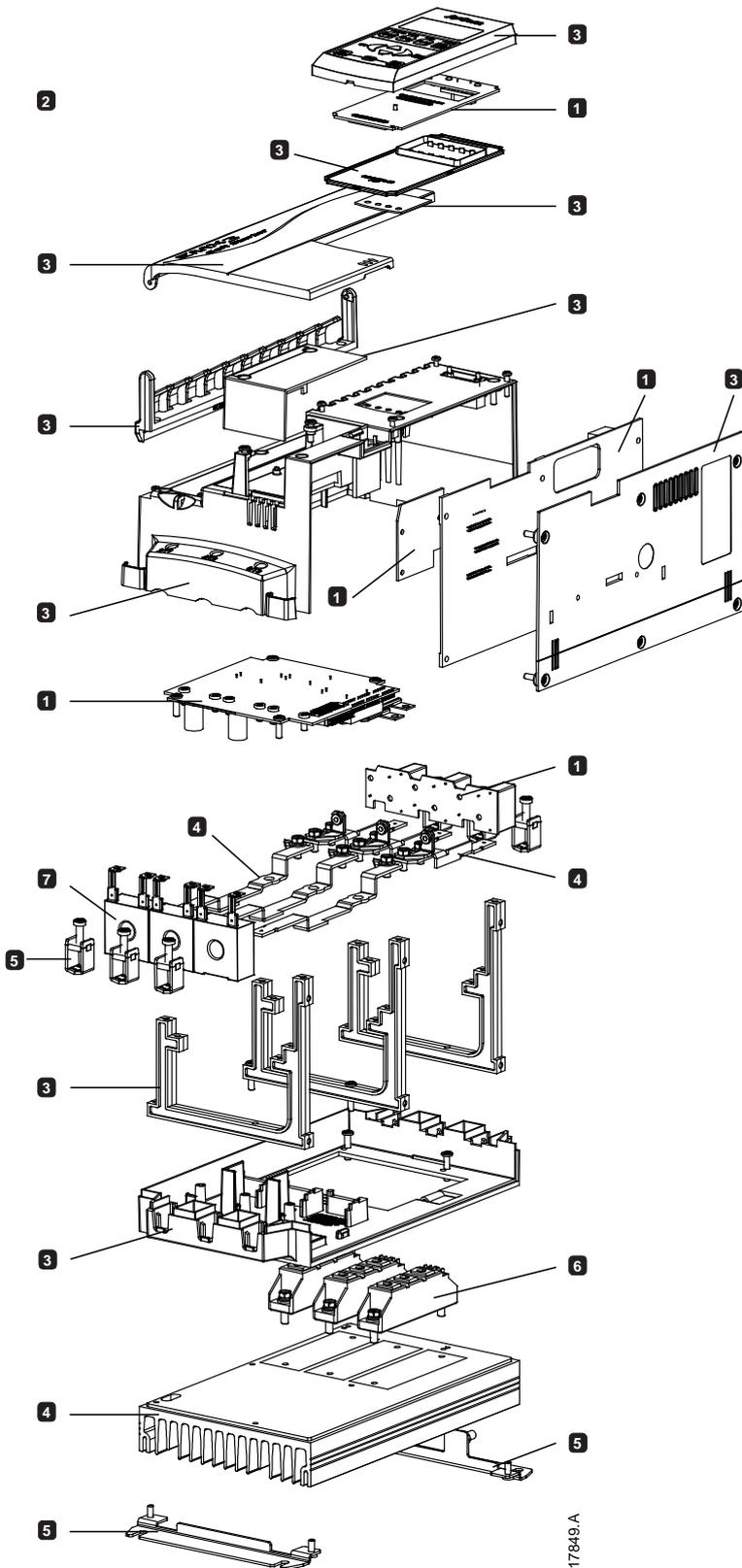


| Type of component | # | Description | Total mass per type (kg) |
|-----------------------------------|----|--|--------------------------|
| Components listed for depollution | 1 | PCBs | 0.214 |
| | 2 | Cables and connectors (not shown on drawing) | 0.014 |
| | 3 | Plastic parts | 0.9 |
| Components listed for dismantling | 4 | Aluminium | 1.876 |
| | 5 | Steel | 0.89 |
| | 6 | Copper | 0.51 |
| | 7 | SCRs | 1.264 |
| Components listed for shredding | 8 | CTs | 0.632 |
| | 9 | Relays | 0.318 |
| | 10 | Insulators | 0.112 |



2.2 EMX3 Series

EMX3 G1B (23 A ~ 53 A)

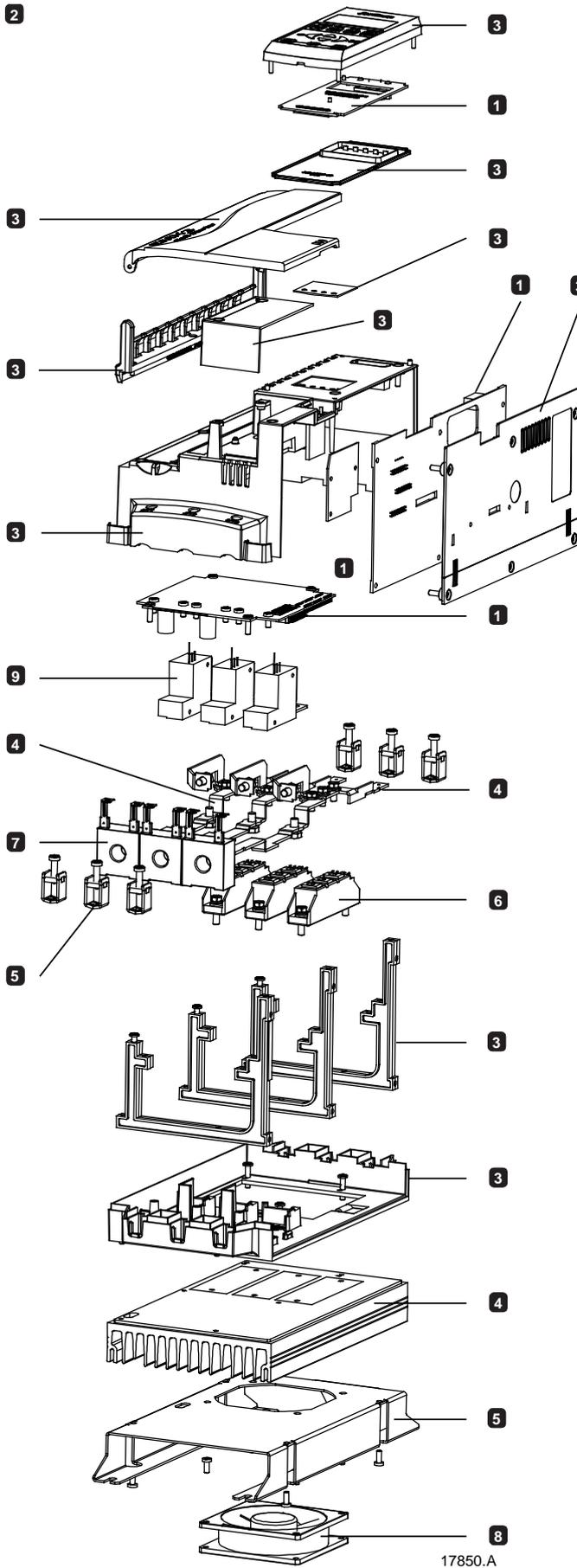


17849.A

| Type of component | # | Description | Total mass per type (kg) |
|-----------------------------------|---|--|--------------------------|
| Components listed for depollution | 1 | PCBs | 0.614 |
| | 2 | Cables and connectors (not shown on drawing) | 0.03 |
| Components listed for dismantling | 3 | Plastic parts | 1.058 |
| | 4 | Aluminium | 1.72 |
| | 5 | Steel | 0.23 |
| Components listed for shredding | 6 | SCRs | 0.28 |
| | 7 | CTs | 0.185 |



EMX3 G1B (76 A ~ 105 A)

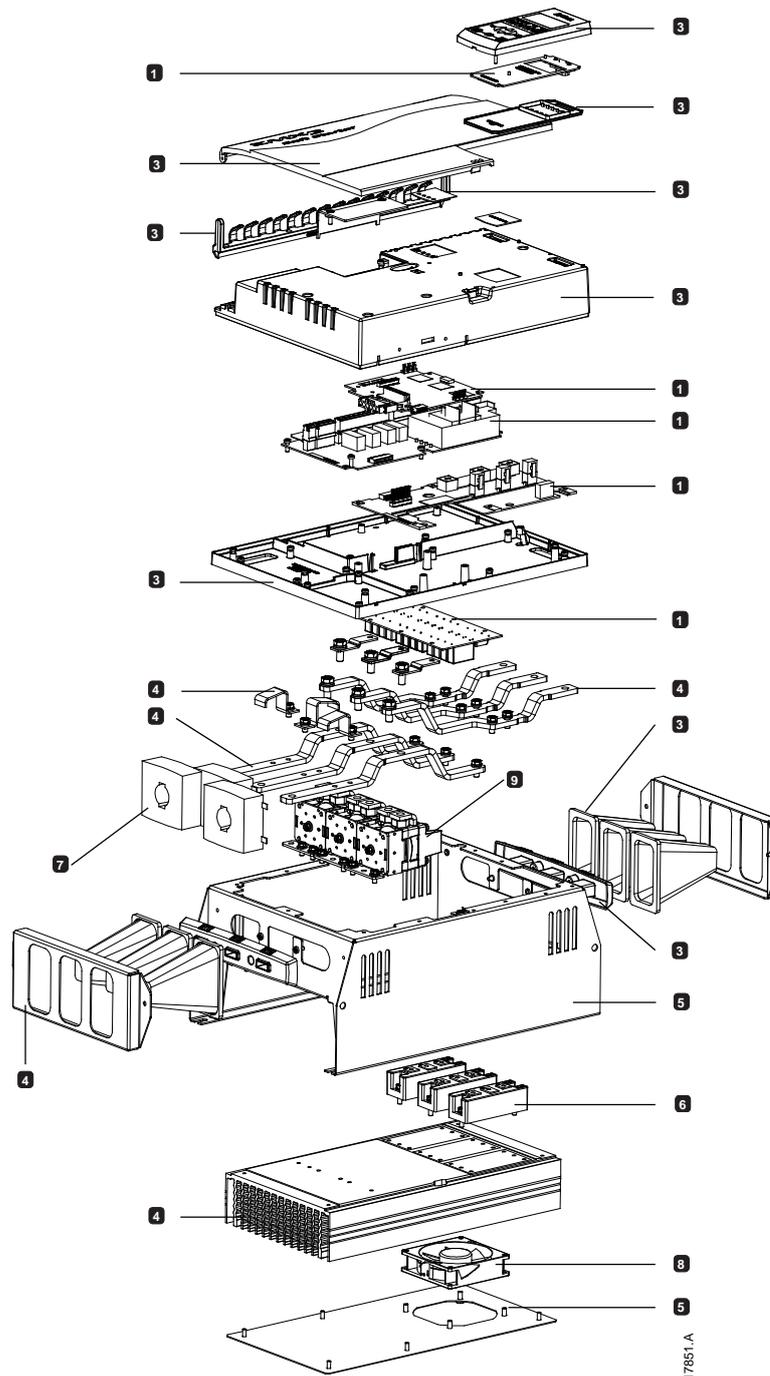


17850.A

| Type of component | # | Description | Total mass per type (kg) |
|-----------------------------------|---|--|--------------------------|
| Components listed for depollution | 1 | PCBs | 0.614 |
| | 2 | Cables and connectors (not shown on drawing) | 0.05 |
| Components listed for dismantling | 3 | Plastic parts | 1.058 |
| | 4 | Aluminium | 1.78 |
| Components listed for shredding | 5 | Steel | 0.82 |
| | 6 | SCRs | 0.28 |
| | 7 | CTs | 0.185 |
| | 8 | Fan | 0.09 |
| | 9 | Relays | 0.24 |



EMX3 G2B (145 A ~ 220 A)

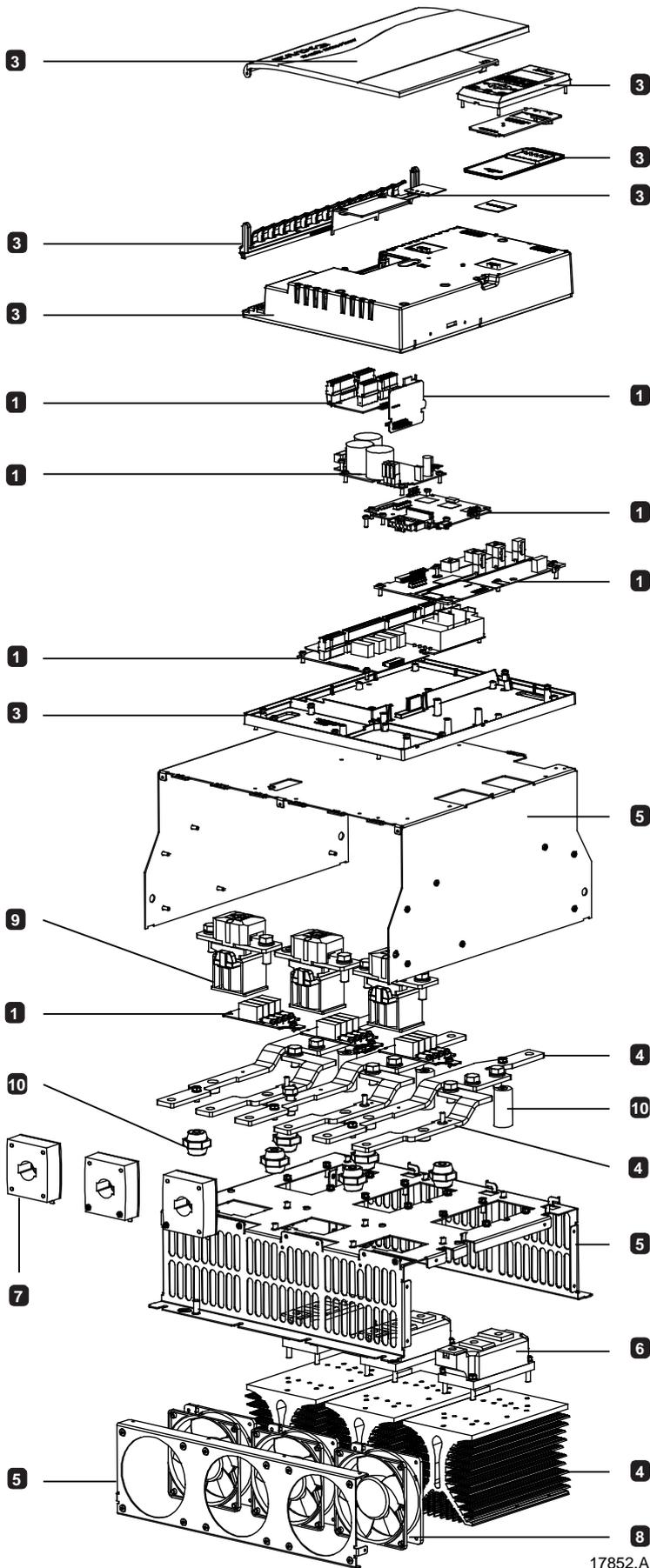


17851_A

| Type of component | # | Description | Total mass per type (kg) |
|-----------------------------------|---|--|--------------------------|
| Components listed for depollution | 1 | PCBs | 0.95 |
| | 2 | Cables and connectors (not shown on drawing) | 0.08 |
| Components listed for dismantling | 3 | Plastic parts | 1.95 |
| | 4 | Aluminium | 4.758 |
| | 5 | Steel | 3.062 |
| Components listed for shredding | 6 | SCRs | 0.498 |
| | 7 | CTs | 0.918 |
| | 8 | Fans | 0.09 |
| | 9 | Contactors | 2.058 |



EMX3 G3B (255 A ~ 425 A)

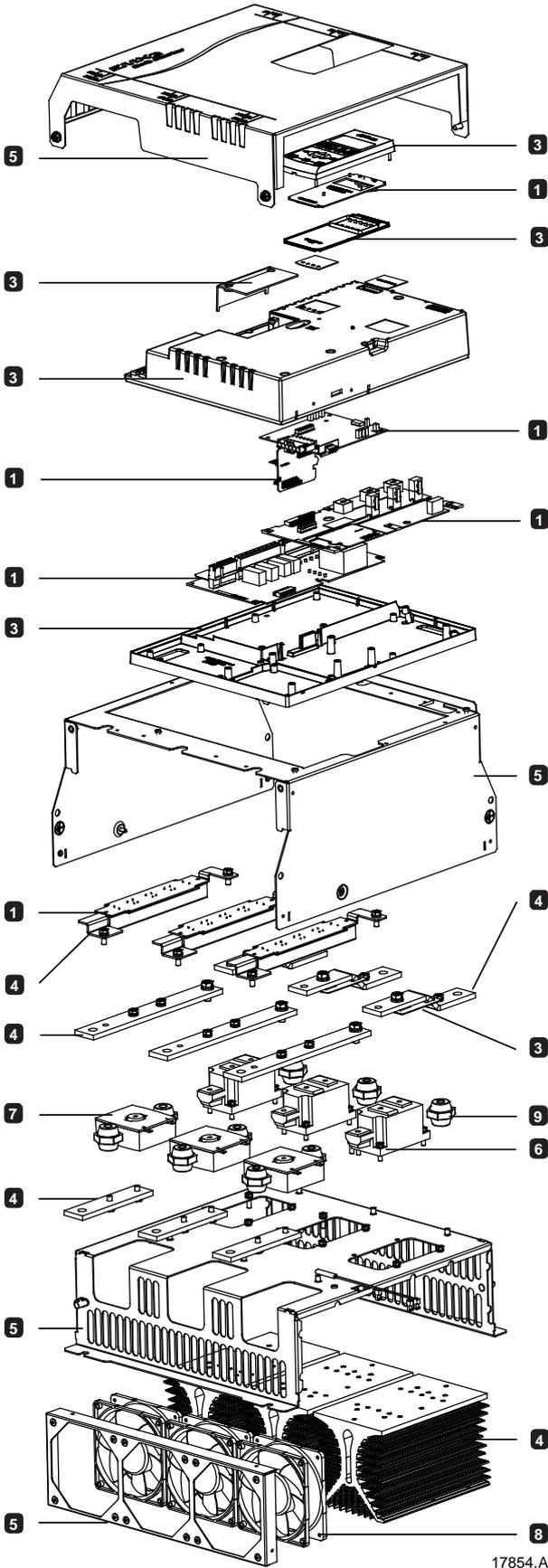


| Type of component | # | Description | Total mass per type (kg) |
|-----------------------------------|----|--|--------------------------|
| Components listed for depollution | 1 | PCBs | 1.18 |
| | 2 | Cables and connectors (not shown on drawing) | 0.15 |
| Components listed for dismantling | 3 | Plastic parts | 0.984 |
| | 4 | Aluminium | 10.734 |
| | 5 | Steel | 6.624 |
| Components listed for shredding | 6 | SCRs | 4.014 |
| | 7 | CTs | 0.906 |
| | 8 | Fans | 0.93 |
| | 9 | Contactors | 2.526 |
| | 10 | Insulators | 0.396 |

17852.A

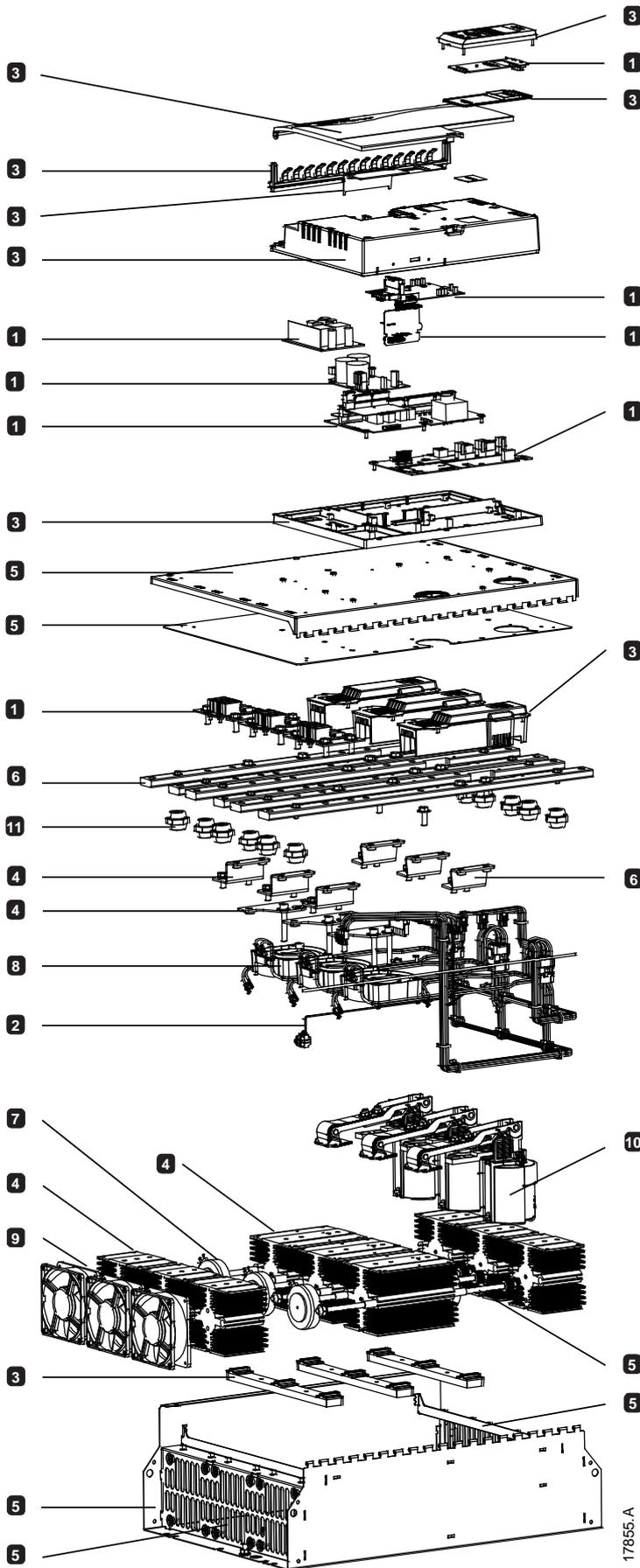


EMX3 G3C (255 A)



| Type of component | # | Description | Total mass per type (kg) |
|-----------------------------------|---|--|--------------------------|
| Components listed for depollution | 1 | PCBs | 0.918 |
| | 2 | Cables and connectors (not shown on drawing) | 0.13 |
| Components listed for dismantling | 3 | Plastic parts | 1.082 |
| | 4 | Aluminium | 10.5 |
| | 5 | Steel | 8.874 |
| Components listed for shredding | 6 | SCRs | 1.884 |
| | 7 | CTs | 0.918 |
| | 8 | Fans | 0.93 |
| | 9 | Insulators | 0.342 |

EMX3 G4B (500 A ~ 1000 A)

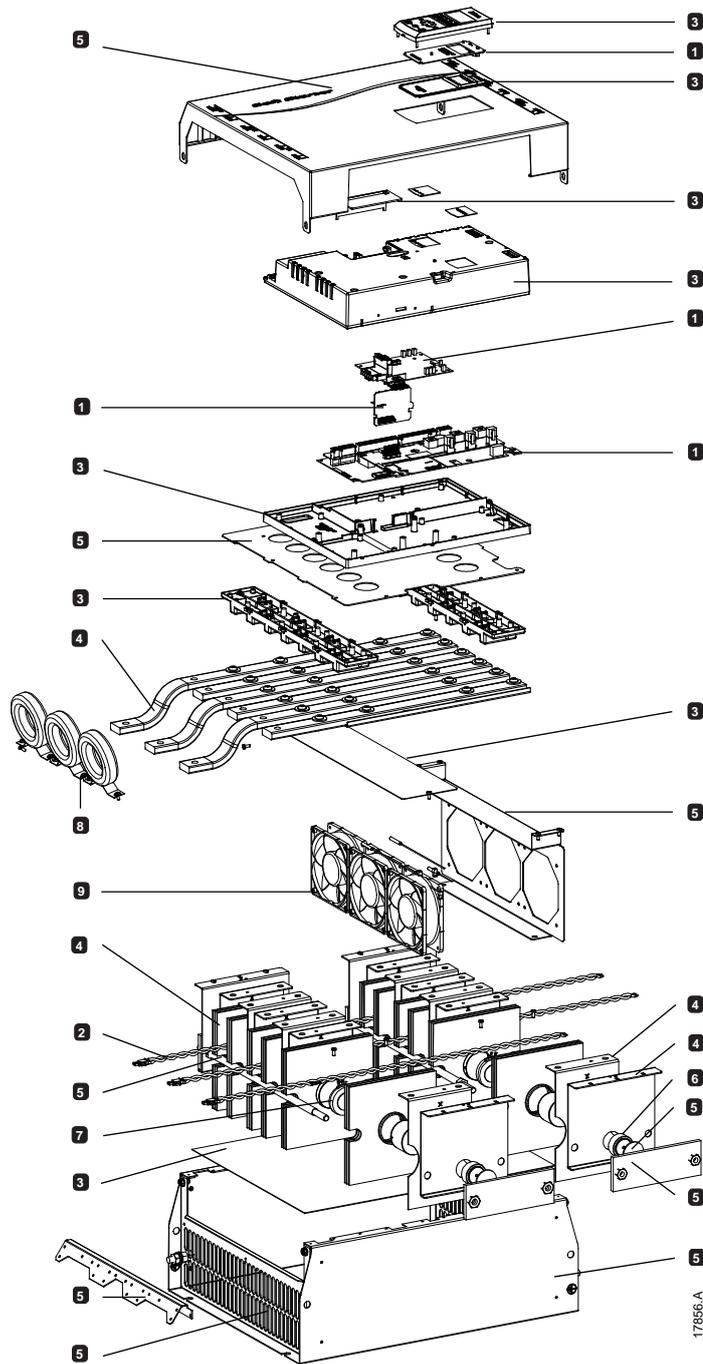


| Type of component | # | Description | Total mass per type (kg) |
|-----------------------------------|----|--|--------------------------|
| Components listed for depollution | 1 | PCBs | 1.222 |
| | 2 | Cables and connectors (not shown on drawing) | 0.566 |
| Components listed for dismantling | 3 | Plastic parts | 2.188 |
| | 4 | Aluminium | 16.71 |
| | 5 | Steel | 19.65 |
| Components listed for shredding | 6 | Copper | 13.5 |
| | 7 | SCRs | 1.74 |
| | 8 | CTs | 2.516 |
| | 9 | Fans | 0.93 |
| | 10 | Contactors | 8.376 |
| | 11 | Insulators | 0.494 |

17855.A



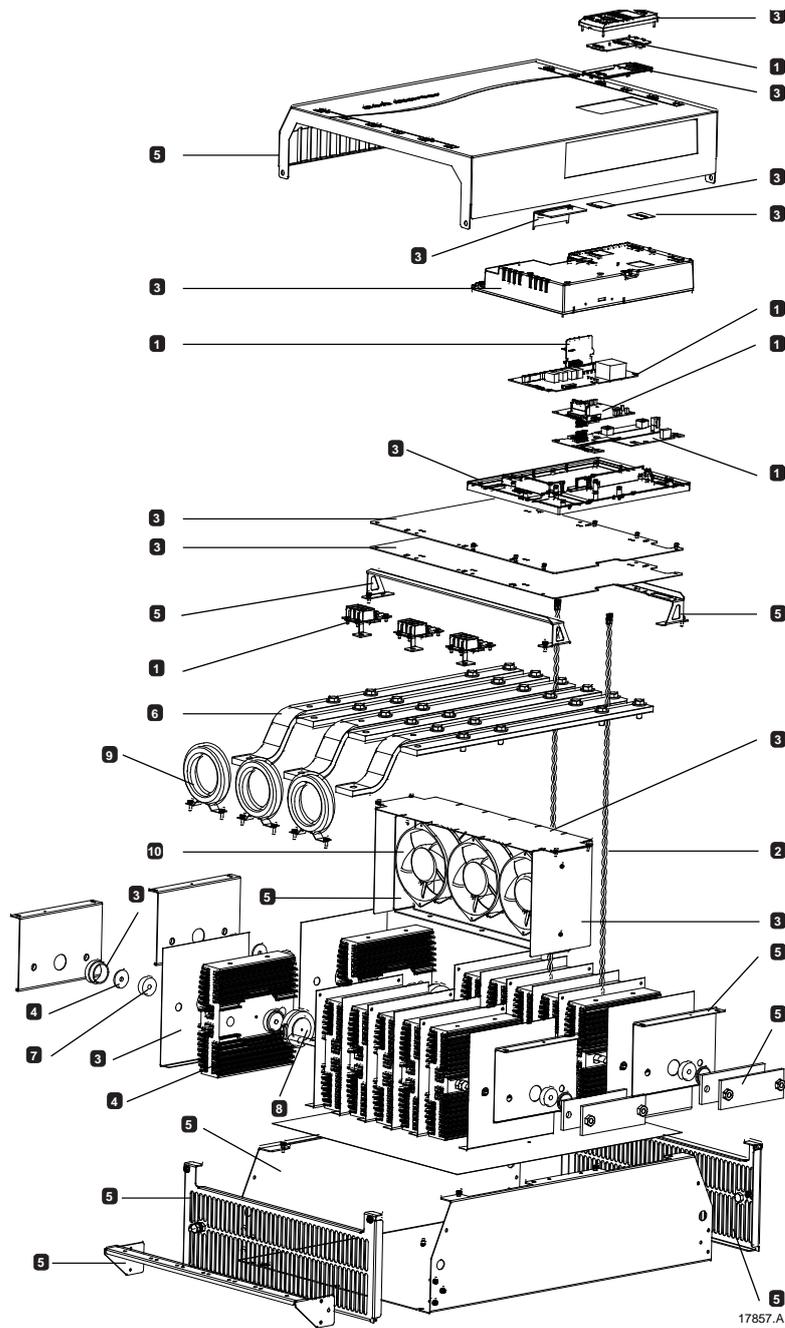
EMX3 G4C (360 A ~ 930 A)



| Type of component | # | Description | Total mass per type (kg) |
|-----------------------------------|---|--|--------------------------|
| Components listed for depollution | 1 | PCBs | 0.556 |
| | 2 | Cables and connectors (not shown on drawing) | 0.15 |
| Components listed for dismantling | 3 | Plastic parts | 1.664 |
| | 4 | Aluminium | 12.602 |
| | 5 | Steel | 18.224 |
| Components listed for shredding | 6 | Ceramic | 0.592 |
| | 7 | SCRs | 3.396 |
| | 8 | CTs | 2.262 |
| | 9 | Fans | 1.588 |



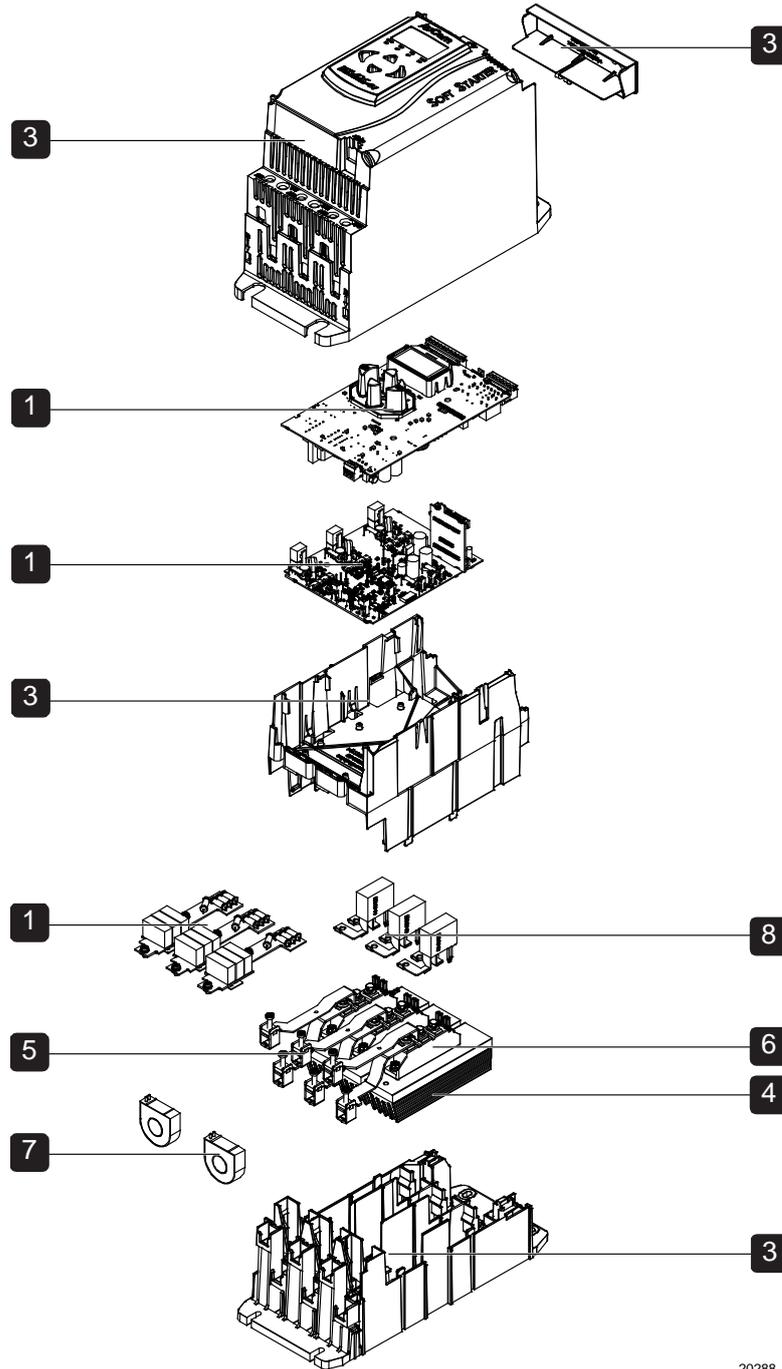
EMX3 G5C (1200 A ~ 1600 A)



| Type of component | # | Description | Total mass per type (kg) |
|-----------------------------------|----|--|--------------------------|
| Components listed for depollution | 1 | PCBs | 0.996 |
| | 2 | Cables and connectors (not shown on drawing) | 0.3 |
| | 3 | Plastic parts | 2.36 |
| Components listed for dismantling | 4 | Aluminium | 49.512 |
| | 5 | Steel | 35.209 |
| | 6 | Copper | 11.8 |
| | 7 | Ceramic | 0.592 |
| Components listed for shredding | 8 | SCRs | 3.396 |
| | 9 | CTs | 2.262 |
| | 10 | Fans | 2.388 |

2.3 EMX4 Series

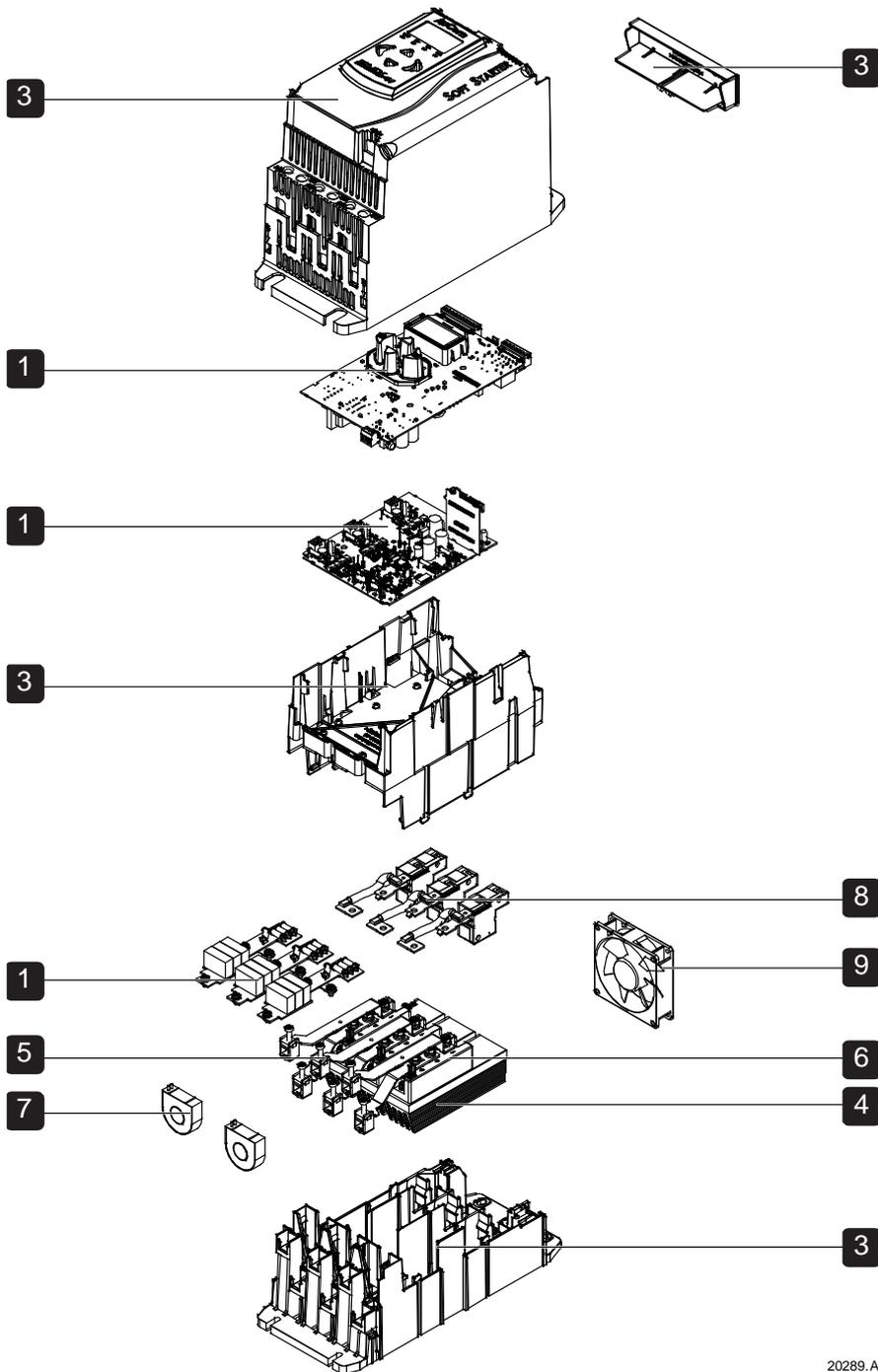
EMX4x-0024B ~ EMX4x-0052B F1 (24 A ~ 52 A)



20288.A

| Type of component | # | Description | Total mass per type (kg) |
|-----------------------------------|---|--|--------------------------|
| Components listed for depollution | 1 | PCBs | 0.635 |
| | 2 | Cables and connectors (not shown on drawing) | 0.050 |
| Components listed for dismantling | 3 | Plastic parts | 2.350 |
| | 4 | Aluminium | 1.221 |
| | 5 | Copper | 0.066 |
| Components listed for shredding | 6 | SCRs | 0.279 |
| | 7 | CTs | 0.120 |
| | 8 | Relays | 0.171 |

EMX4x-0064B ~ EMX4x-0135B F1 (64 A ~ 135 A)

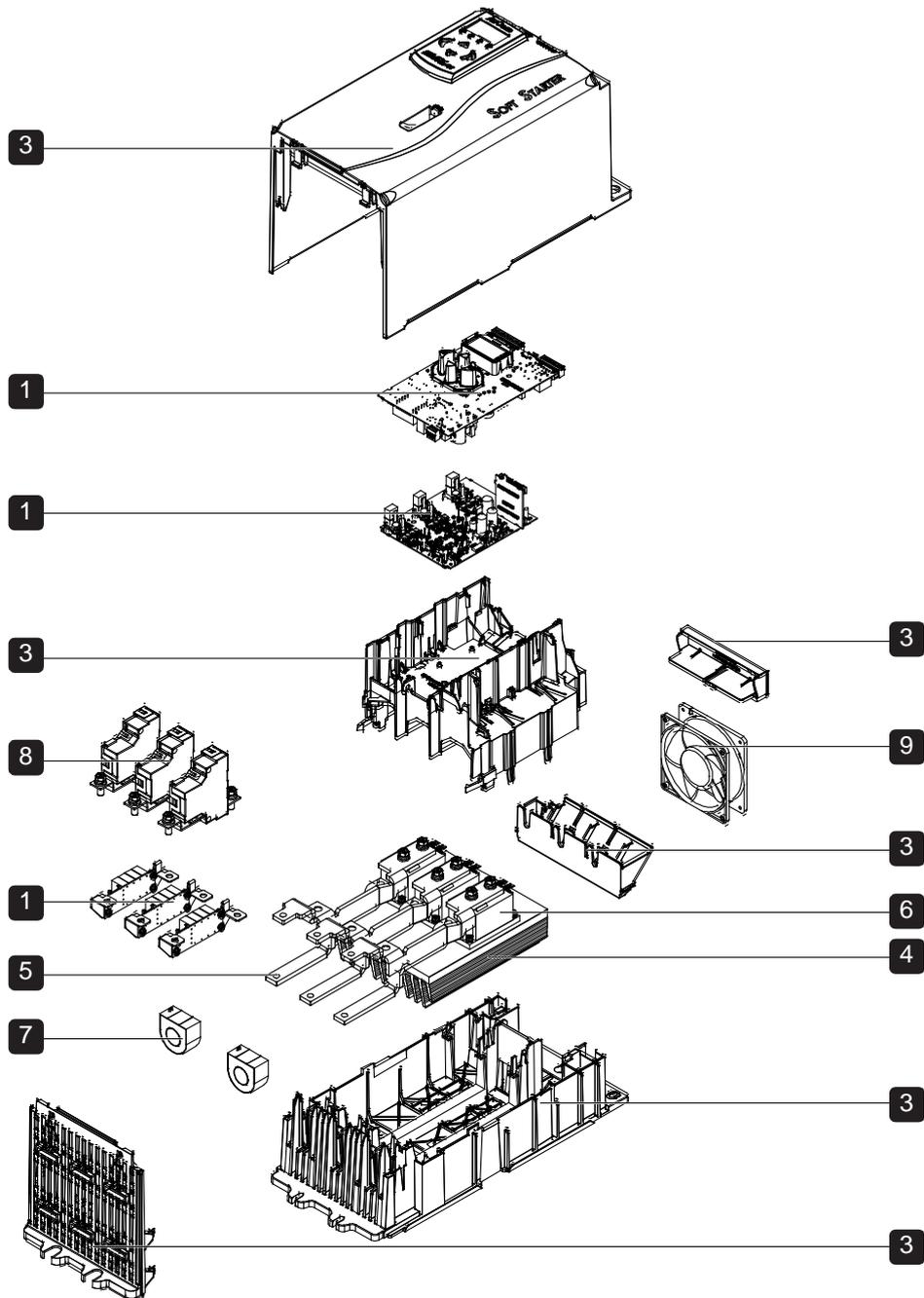


20289.A

| Type of component | # | Description | Total mass per type (kg) |
|-----------------------------------|---|--|--------------------------|
| Components listed for depollution | 1 | PCBs | 0.635 |
| | 2 | Cables and connectors (not shown on drawing) | 0.050 |
| Components listed for dismantling | 3 | Plastic parts | 2.350 |
| | 4 | Aluminium | 1.221 |
| | 5 | Copper | 0.213 |
| Components listed for shredding | 6 | SCRs | 0.496 |
| | 7 | CTs | 0.120 |
| | 8 | Relays | 0.327 |
| | 9 | Fan | 0.090 |



EMX4x-0184B ~ EMX4x-0250B F2 (184 A ~ 250 A)

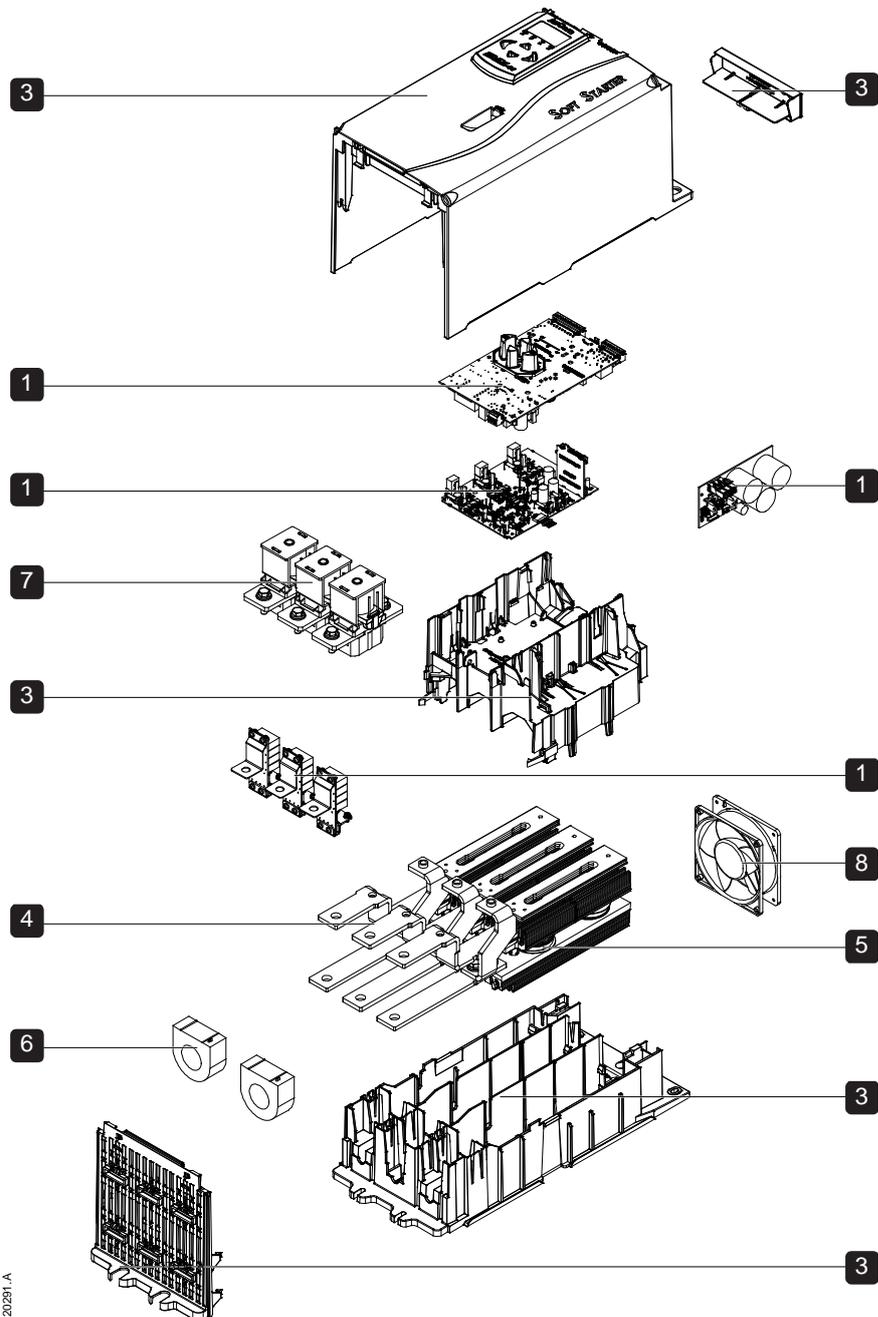


20290.A

| Type of component | # | Description | Total mass per type (kg) |
|-----------------------------------|---|--|--|
| Components listed for depollution | 1 | PCBs | 0.716 |
| | 2 | Cables and connectors (not shown on drawing) | 0.065 |
| | 3 | Plastic parts | 4.230 |
| Components listed for dismantling | 4 | Aluminium | 1.099 (0184B ~ 0229B) or 2.286 (0250B) |
| | 5 | Copper | 0.697 |
| | 6 | SCRs | 3.390 |
| Components listed for shredding | 7 | CTs | 0.260 |
| | 8 | Relays | 0.810 |
| | 9 | Fan | 0.310 |



EMX4x-0352B ~ EMX4x-0580B F3 and F4 (352 A ~ 580 A)



20281_A

| Type of component | # | Description | Total mass per type (kg) |
|-----------------------------------|---|--|---|
| Components listed for depollution | 1 | PCBs | 0.926 |
| | 2 | Cables and connectors (not shown on drawing) | 0.065 |
| Components listed for dismantling | 3 | Plastic parts | 4.120 |
| | 4 | Copper | 0.996 (0352B ~ 0410B) or 3.309 (0550B ~ 0580B) |
| Components listed for shredding | 5 | Power assembly | 5.811 |
| | 6 | CTs | 0.500 (0352B ~ 0410B) or 0.560 (0550B ~ 0580B) |
| | 7 | Relays | 2.520 (0352B ~ 0410B) or 2.760 (0550B ~ 0580B) |
| | 8 | Fan | 0.310 |