

Power transformer and reactor fittings —

Part 6: Cooling equipment — Removable radiators for oil-immersed transformers

The European Standard EN 50216-6:2002 has the status of a
British Standard

ICS 29.180

National foreword

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The UK participation in its preparation was entrusted to Technical Committee PEL/14, Power transformers, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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Power transformer and reactor fittings
Part 6: Cooling equipment -
Removable radiators for oil-immersed transformers

Accessoires pour transformateurs
de puissance et bobines d'inductance
Partie 6: Appareillage de refroidissement -
Radiateurs détachables
pour transformateurs immergés dans l'huile

Zubehör für Transformatoren
und Drosselspulen
Teil 6: Kühlungseinrichtungen -
Abbaubare Radiatoren
für Öltransformatoren

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 14, Power transformers.

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50216-6 on 2001-07-01.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2002-08-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2004-08-01

EN 50216-6 is to be read in conjunction with EN 50216-1.

Contents

	Page
1 Scope	4
2 Normative references	4
3 Manufacturing prescription	4
3.1 Radiator types defined in this document.....	4
3.2 General characteristics.....	4
3.3 Material	4
3.4 Dimensions and tolerances	5
3.5 Lifting attachments and mechanical connections.....	5
3.6 Surface protection	5
4 Tests.....	5
4.1 Routine tests	5
4.2 Type tests.....	6
5 Preparation for transport and storage	6

1 Scope

EN 50216-6 covers radiators, i.e. the thermal exchangers for the oil cooling with natural ambient air circulation. Such radiators are made with several elements with cooling channels connected in parallel.

This standard defines the overall dimensions and ensures the mechanical interchangeability achieving the same thermal performances.

2 Normative references

Addition to EN 50216-1:

ISO 4406	1999	Hydraulic fluid power - Fluids - Method for coding the level of contamination by solid particles
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3 Manufacturing prescription

3.1 Radiator types defined in this document

The designations to identify the types of radiator are

- | | |
|------|--|
| FA | radiators with square flanges and elements of unequal length (see Figure 1) |
| FG | radiators with square flanges and elements of equal length (see Figure 2) |
| FTR | radiators with square flanges and elements of equal length and with several elements with reduced width (see Figure 3) |
| FTTO | tangential radiators with oval flanges and elements of equal length (see Figure 4) |
| FR | radiators with square flanges with lowered upper header (see Figure 5) |
| FTT | tangential radiators with square flanges and elements of equal length (see Figure 6) |

3.2 General characteristics

The main radiator components are

- headers,
- connection flanges,
- elements.

The headers shall be made in such a way to guarantee a complete filling and a complete draining. Oblique elements or reduced elements are acceptable.

The layout is given in Figures 1 to 6.

The radiators shall be provided with an air vent device on the top header and a draining device on the bottom header.

3.3 Material

The radiator elements shall be made of stamped steel plates or steel pipes (round or ovaled) with a thickness of 1,2 mm, in conformity with ISO, EN or equivalent standards. Other thicknesses may be applicable.