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Low-voltage switchgear and controlgear –
Part 4-1: Contactors and motor-starters – Electromechanical contactors and motor-starters

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LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

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INTERPRETATION SHEET 1

This interpretation sheet has been prepared by subcommittee 121A: Low-voltage switchgear and controlgear, of IEC technical committee 121: Switchgear and controlgear and their assemblies for low voltage.

The text of this interpretation sheet is based on the following documents:

DISH	Report on voting
121A/336/DISH	121A/342/RVDISH

Full information on the voting for the approval of this interpretation sheet can be found in the report on voting indicated in the above table.

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Interpretation of the first paragraph of 6.2

The reference to 5.2 of IEC 60947-1:2007, IEC 60947-1:2007/AMD1:2010 is intended to cover the whole subclause where its first paragraph can be discarded.

In particular, the third paragraph of this Subclause 5.2 requiring the marking on the equipment of manufacturer's name or trademark and type designation or serial number is covering items a) and b) of 6.1.1 of IEC 60947-4-1:2018.

Interpretation of footnotes [n] and [o] of Table 7

The standard making conditions for the utilization category AC-3e are defined by the ratio I / I_e equal to 12 with the corresponding value of Cos ϕ in footnote [o].

Footnote [n] provides the possibility to select an alternate value of the ratio I / I_e between 12 and 13, and gives the corresponding equations to determine the value of Cos ϕ.

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Interpretation of the rated operational current of Table 13 and Table 14

Tables 13 and 14 are intended to be used for contactors and starters specified for motor loads. If the contactor or starter is specified with more than one motor load utilization category (AC-2, AC-3, AC-3e or AC-4), the rated operational current I_e corresponding to the utilization category AC-3 is preferred for determining the prospective current "*r*" for the test.

The utilization category AC-3 is considered as the most representative use case and is deemed to cover the other motor utilization categories.

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