

ENGINEERING PRACTICE STUDY

TITLE: PROPOSED STANDARDIZATION OPTIONS FOR [MIL-PRF-55629/20](#),
[MIL-PRF-55629/21](#) AND [MIL-PRF-55629/22](#) CIRCUIT BREAKERS

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FINAL REPORT

Study Conducted by DLA Land and Maritime

Project Number: 5925-2021-001

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I. OBJECTIVE: An engineering practices study has been conducted to determine the future standardization of obsoleted [MIL-PRF-55629/20](#), [MIL-PRF-55629/21](#) and [MIL-PRF-55629/22](#) (Circuit Breakers, Magnetic, Panel Seal, Trip-Free, Series Trip).

II. BACKGROUND: On March 27, 2019, Sensata Technologies, discontinued their [MIL-PRF-55629/20](#), [MIL-PRF-55629/21](#) and [MIL-PRF-55629/22](#) circuit breakers without replacement. Sensata was the sole qualified source for these items. A review of DLA's annual demand for these products shows substantial activity with procurements performed up to this year (2020).

DLA Land and Maritime VAT canvassed the military services, circuit breaker manufacturer, and user communities, seeking feedback on the future standardization of these documents. Four standardization options were presented for their review. 1) Development of DLA Land and Maritime drawings with [MIL-PRF-55629](#) testing imposed, to offer as replacements, 2) Development of Commercial Item Descriptions (CIDs) to offer as replacements, 3) Revise and convert these specification sheets from Qualification Inspection to First Article Inspection, or 4) Cancel these specification sheets without replacement.

III. RESULTS: Recipients of the study were requested to provide comments and following are the responses received:

Air Force-85: Prefers converting these specifications to First Article Inspection, secondly, they prefer developing DLA Land and Maritime drawings, to offer as replacements, and their least preference was the development of CIDs to offer as replacements. With substantial procurement activity, cancelling these documents was not an option with the Air Force.

Sensata Technologies: The sole manufacture prefers developing CIDs to offer as replacements while not entertaining the development of DLA Land and Maritime drawings, or adding First Article Inspection, nor cancelation of these documents all together.

IV. CONCLUSIONS: Since the sole manufacturer will only supply circuit breakers in a commercial CID format, DLA Land and Maritime VAT will need to develop CIDs for future needs of these items.

V. RECOMMENDATIONS: DLA Land and Maritime recommends that projects be initiated to develop CIDs, to offer as replacements, for the obsoleted [MIL-PRF-55629/20](#), [MIL-PRF-55629/21](#) and [MIL-PRF-55629/22](#) circuit breakers.