

POWER DISTRIBUTION BAY BA17/1

Introduction

This is a 19-inch bay framework on which switch-gear and distribution apparatus used at certain relay stations are mounted. The D.C.C. code BA17/1 may not appear on the bay or on related drawings.

A number of relay stations are so similar in design that it is possible to prefabricate the entire power distribution system. A wiring loom, cable trunking and lighting fittings are made to a common design. This equipment, together with a BA17/1, can then readily be assembled on site.

General Description

The circuit of the BA17/1 is shown in Fig. 1. The incoming mains supply can be either via a 240-volt single-phase feeder or from a 480-volt single-phase-and-neutral three-wire system. Terminals L1 and L2 are connected together if a 240-volt incoming supply is used.

The incoming-supply feeder enters the bay from ground level via the supply authority's metering equipment. A main isolator, an a.v.r. bypass-and-isolate switch, and two pairs of 13-ampere socket-outlets associated with the general-services supply

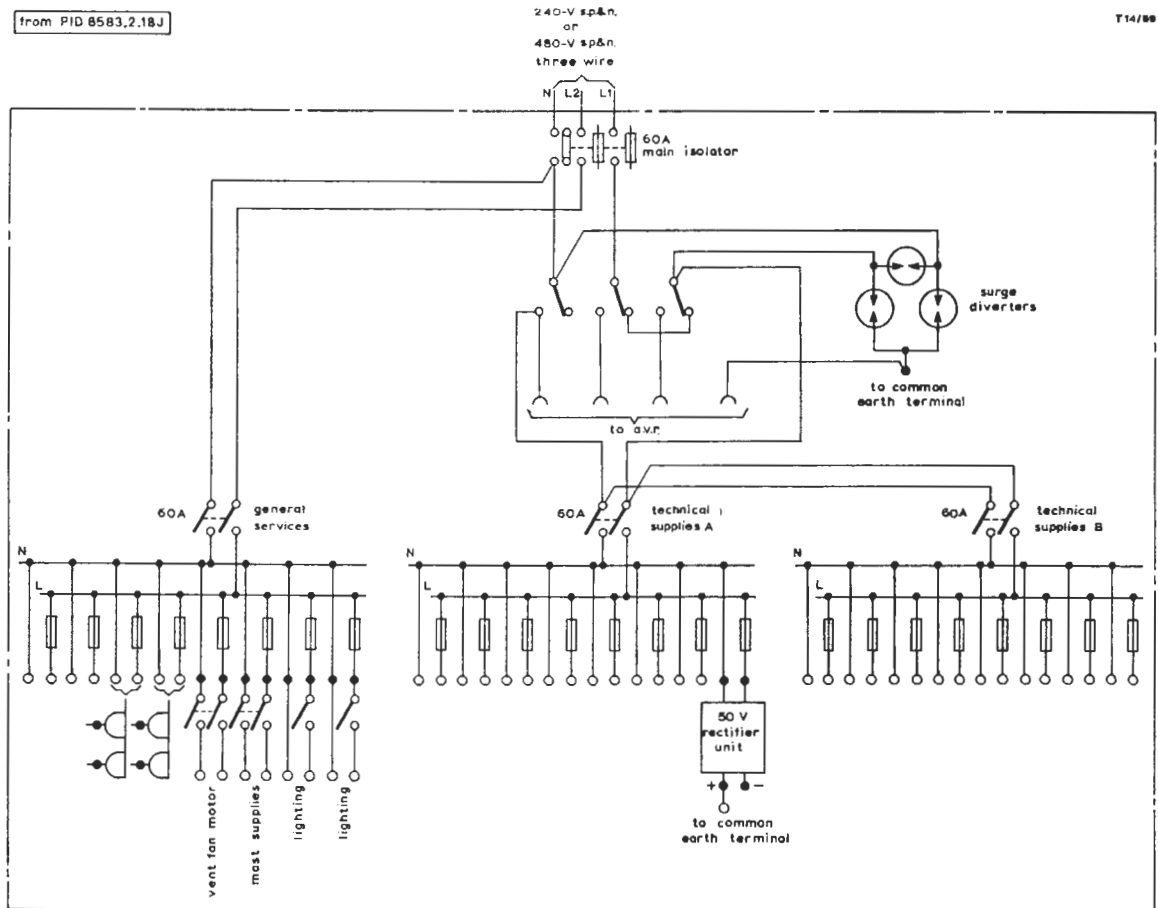


Fig. 1 Power Distribution Bay BA17/1: Circuit

The D.C.C. code and corresponding title may not appear on this equipment or on drawings

are mounted on two panels immediately above the metering equipment. Three surge-diverters are mounted inside the bay behind the a.v.r. bypass-and-isolate switch. The a.v.r. itself is mounted externally to the bay, connection being made via a 4-pin plug and socket.

On the upper half of the bay are three 240-volt 8-way distribution fuse panels and their associated isolators. At the top of the bay are either one or two 50-volt rectifier units.

The 240-volt distribution circuits provide technical and general-service supplies. Two of the 8-way fuse panels are for A and B technical supplies; these

supplies are normally regulated by the a.v.r., although this can if necessary be bypassed. The remaining fuse panel is for unregulated general-service supplies. Two ways of this panel each feed one of the pairs of 13-ampere socket-outlets; a further four ways are connected via switches to lighting and ventilation circuits.

Slight differences may exist between installations in respect of the type of a.v.r. and rectifier unit used and in the various connections made to the fuse panels. Details are given in the Instructions for individual Stations.

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