

## INTRODUCTION

The Powershield unit is a solid state trip device used to protect the power system against damage caused by overload and faults. It is supplied as an integral part of the BBC type LK low voltage power circuit breaker.

Four basic trip elements within the Powershield trip unit perform the protective functions: long-time, short-time, instantaneous, and ground. Models with various combinations of these functions are available (see table 1). Selection is based on the protection and coordination requirements for the particular power system.

The trip unit is completely tested prior to shipment. Since

there are no mechanical devices which may have lost adjustment during shipment, no readjustments, other than making the required settings, need be made prior to placing in service. Nor is maintenance required in the usual sense of cleaning, adjusting, or lubricating.

Electrical tests which may be made as part of a routine procedure are included in this book. The frequency of testing will vary from user to user depending on many factors. A typical interval of 1 or 2 years is suggested.

TABLE 1 - POWER SHIELD STANDARD TYPES

SOLID STATE TRIP DEVICE  TYPE	TRIP ELEMENTS					TIME-CURRENT CHARACTERISTICS CURVES		USAGE
	LONG-TIME *	SHORT-TIME *	INSTANTANEOUS	GROUND *	OPERATION INDICATORS	OVCT.	GROUND	
LSS 1	(1 BAND) X		X		NONE	TD 9058		GENERAL PURPOSE
LSS 1G	(1 BAND) X		X	X	NONE	TD 9058	TD 9062	GENERAL PURPOSE
LSS 2	(1 BAND) X	X			NONE	TD 9068		DUAL SELECTIVE
LSS 4	X	X			OPTIONAL	TD 9060		DUAL SELECTIVE
LSS 4G	X	X		X	OPTIONAL	TD 9060	TD 9062	DUAL SELECTIVE
LSS 5	X	X	X		OPTIONAL	TD 9060		TRIPLE SELECTIVE
LSS 5G	X	X	X	X	OPTIONAL	TD 9060	TD 9062	TRIPLE SELECTIVE
LSS 6	X		X		OPTIONAL	TD 9059		GENERAL PURPOSE
LSS 6G	X		X	X	OPTIONAL	TD 9059	TD 9062	GENERAL PURPOSE

\* 3 Delay Bands Provided (Except As Noted)

## PRECAUTIONS

The following precautions should be observed before placing the unit in service:

Select proper settings. Be sure that no tap setting pin has

been left in a TEST location.

Check that the connection cable is properly seated and locked in position with its retaining clip.