

CASES

DRAWOUT CASES:

All drawout cases are dust-proof and have a filter breather at the back to allow the free flow of clean air. The cases can be flush or projection mounted.

The relay frame is locked in position by two or four latches which can also be used to lift it out of the case. On protective relays one latch is painted red. This latch is used to open the trip circuit. Current transformer secondary circuits are automatically short-circuited when a relay is withdrawn from its case. Reset buttons for hand-reset contacts and operation indicators are fitted in the cover.

MOULDED CASES:

Moulded non-drawout cases can be flush or projection mounted. Reset buttons for hand-reset contacts and operation indicators are fitted in the cover.

FINISH:

The standard finish for drawout cases is eggshell black; moulded cases have a gloss black finish. The cases are tropicalised.

CASE DIMENSIONS:

Drawout Case — size 1/2D, 1D, 1½D, 3D (Vertical) and 3D (Horizontal)
Non-drawout cases — size 1/4N, 1/2N

Note: Special cases of size 4½D and modular housing are being introduced.
Details on request.

TERMINALS:

Drawout Cases:

Single ended case	— 10 terminals
Single ended 3D (Hortl.) case	— 30 terminals
Double ended case	— 20 terminals

Non-Drawout Cases:

Case size 1/4N — 10 terminals
Case size 1/2N — 12 terminals

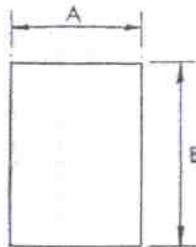
NOTE:

Special drawout relays with 'JONES Plug' having 40 terminals are available.
Details on request.

CASE OUTLINE DRAWINGS AND REFERENCES

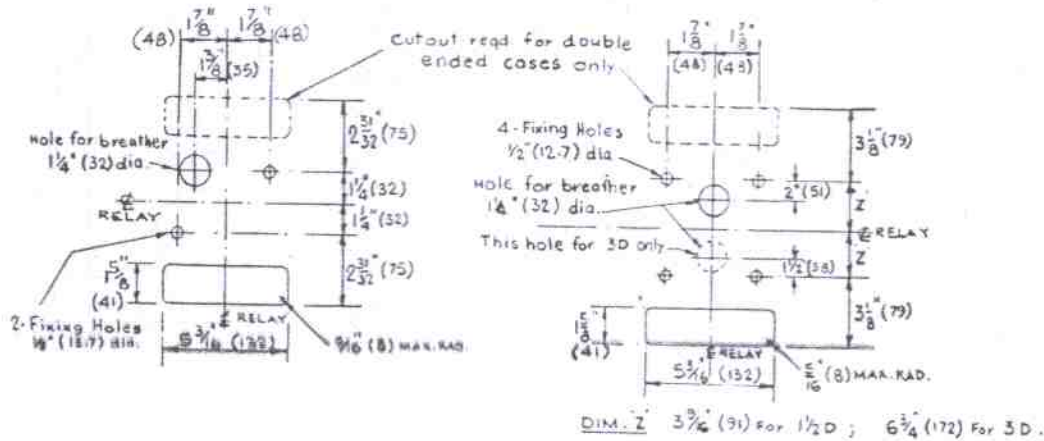
Case Ref.	S.No.	Type	Proj. Mounting Designa- tion	Flush Mounting Designa- tion	Outline Drawing Number	Maximum No. of Terminals
$\frac{1}{2}$ N	$\frac{1}{2}$ size	Non-drawout (Moulded)	YP	YF	MFM 015	10
$\frac{1}{2}$ N (Vert)	$\frac{1}{2}$ size	Non-drawout (Moulded)	ZP	ZF	MFM 016	12
$\frac{1}{2}$ N (Horl)	$\frac{1}{2}$ size	Non-drawout (Moulded)	ZR	ZG	MFM 017	12
$\frac{1}{2}$ D (Horl)	$\frac{1}{2}$ size	Drawout Single ended	NR	NG	FGOO 31 Sht 1	10
1D	Single pole	Drawout (Single ended)	AP	AF	MFJ 012	10
1D	Single pole	Drawout (Double ended)	BP	BF	MFJ 012	20
1 $\frac{1}{2}$ D	1 $\frac{1}{2}$ Pole	Drawout (Single ended)	PP	PF	MFJ 013	10
1 $\frac{1}{2}$ D	1 $\frac{1}{2}$ Pole	Drawout (Double ended)	RP	RF	MFJ 013	20
3D (Vert)	Triple pole	Drawout (Single ended)	EP	EF	MFJ 013	10
3D (Vert)	Triple pole	Drawout (Double ended)	FP	FF	MFJ 013	20
3D (Horl)	Triple pole	Drawout (Single ended)	ER	EG	MFJ 014	30

PANEL CUT-OUT DIMENSIONS FLUSH MOUNTING CASES



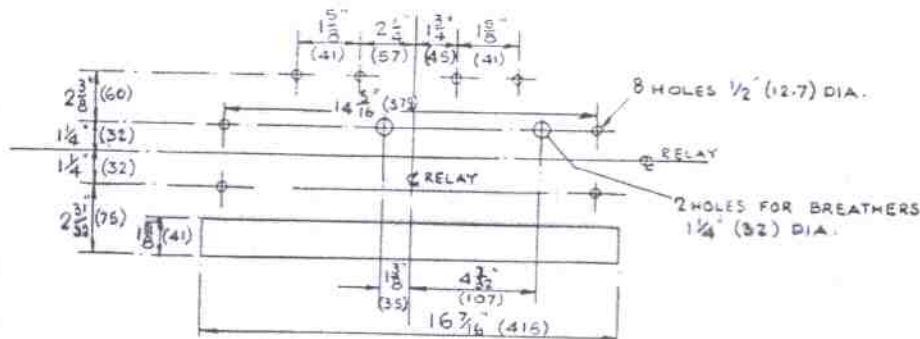
Case Size	Dimensions	
	A	B
1D	5 $\frac{23}{32}$ " (150)	8 $\frac{23}{32}$ " (222)
1 $\frac{1}{2}$ D	5 $\frac{23}{32}$ " (150)	13 $\frac{1}{8}$ " (348)
3D (Vert)	5 $\frac{23}{32}$ " (150)	20 $\frac{1}{8}$ " (510)
3D (Horl)	17 $\frac{1}{8}$ " (435)	8 $\frac{23}{32}$ " (222)
$\frac{1}{4}$ N	3 $\frac{13}{16}$ " (97)	4 $\frac{5}{16}$ " (109)
$\frac{1}{2}$ N (Vert)	4 $\frac{9}{16}$ " (116)	5 $\frac{1}{16}$ " (145)
$\frac{1}{2}$ N (Horl)	5 $\frac{1}{16}$ " (145)	4 $\frac{9}{16}$ " (116)
$\frac{1}{2}$ D (Horl)	5 $\frac{23}{32}$ " (150)	5 $\frac{3}{8}$ " (137)

PROJECTING MOUNTING CASES (DRAWOUT)



SIZE 1D

SIZES $1\frac{1}{2}$ D AND 3D (VERTICAL)



SIZE 3D (HORIZONTAL)

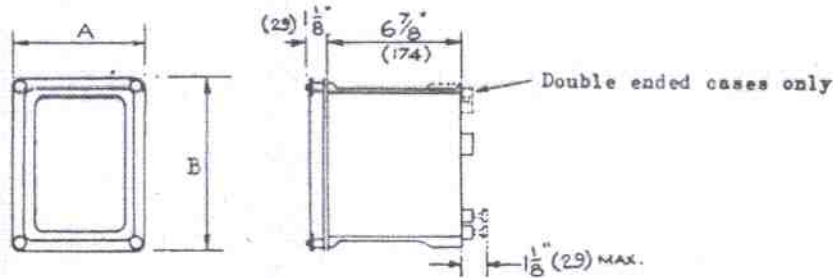
Panel cut-outs as viewed from front.

Certified drawings will be supplied on request
 Figures in brackets are millimetre equivalents.

ENGLISH ELECTRIC

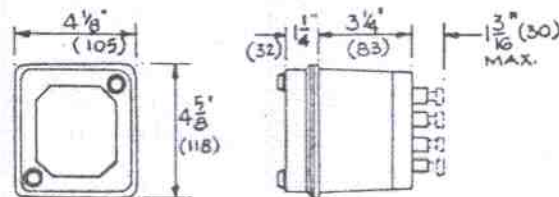
OVERALL DIMENSIONS - DRAWOUT AND NON-DRAWOUT (MOULDED) CASES (FLUSH OR PROJECTING MOUNTING)

DRAWOUT CASES

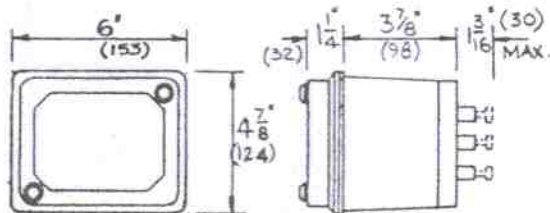


Case Size	Dimensions	
	A	B
$\frac{1}{2}$ D (Horl)	$6\frac{1}{8}"$ (170)	$6\frac{1}{8}"$ (154)
1D	$6\frac{1}{8}"$ (170)	$9\frac{3}{8}"$ (233)
$1\frac{1}{2}$ D	$6\frac{1}{8}"$ (170)	$14\frac{1}{4}"$ (362)
3D (Vert)	$6\frac{1}{8}"$ (170)	$20\frac{5}{8}"$ (524)
3D (Horl)	$17\frac{7}{8}"$ (454)	$9\frac{3}{8}"$ (233)

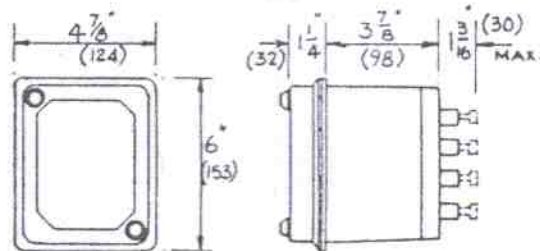
NON-DRAWOUT (MOULDED) CASES



SIZE $\frac{1}{2}$ N - UPTO 10 TERMINALS



SIZE $\frac{1}{2}$ N (HORIZ) - UPTO 12 TERMINALS



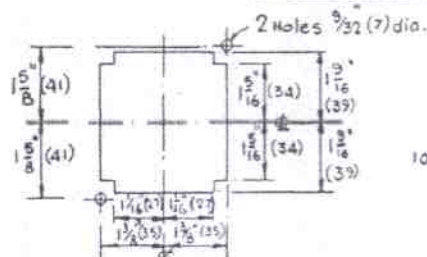
SIZE $\frac{1}{2}$ N (VERT) - UPTO 12 TERMINALS

Certified drawings will be supplied on request.
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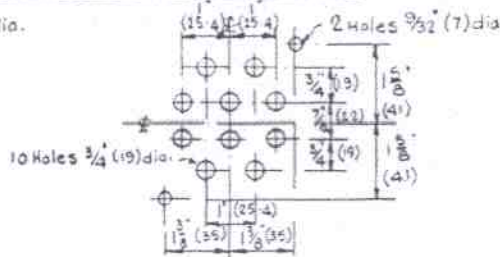
ENGLISH ELECTRIC

PANEL CUT-OUT DIMENSIONS (CONTINUED)

PROJECTING MOUNTING CASES. (NON-DRAWOUT)

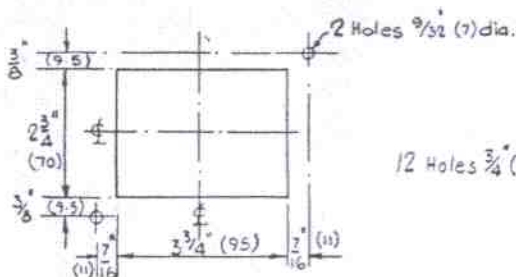


Preferred Cut-out

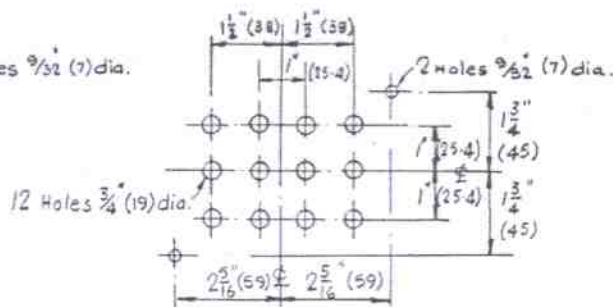


Alternative Cut-out

SIZE 1/4N

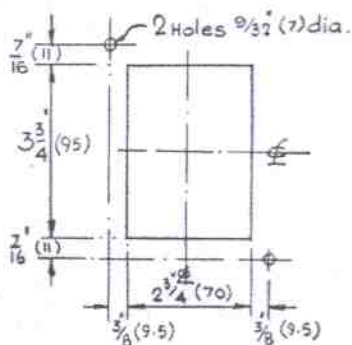


Preferred Cut-out

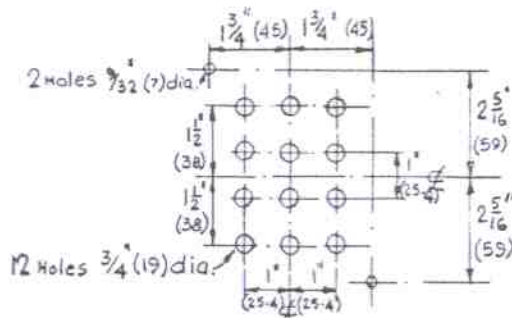


Alternative Cut-out

SIZE 1/4N (HORIZONTAL)



Preferred Cut-out



Alternative Cut-out

SIZE 1/4N (VERTICAL)

Panel cut-outs as
viewed from front.

Certified drawings will be supplied on request.
Figures in brackets are millimetre equivalents.