

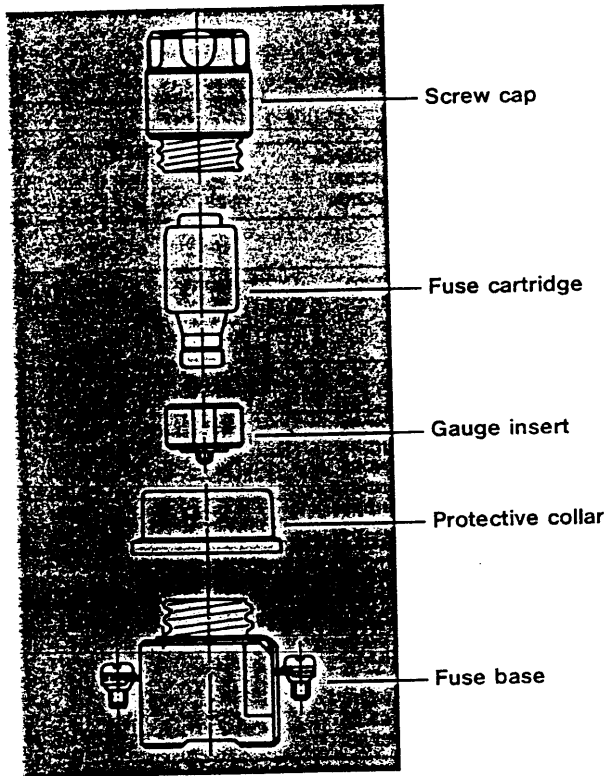
# D-FUSES, 500 V

VDE 0635 and VDE 0636

170-436 → 445

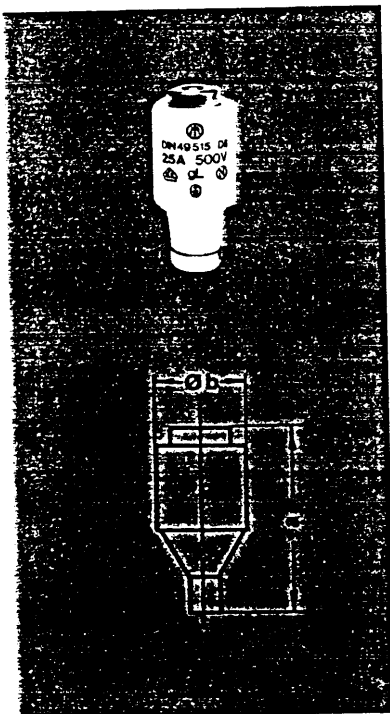
The D-fuse system comprises: fuse base, gauge insert, fuse cartridge, and screw cap. It is rated for voltages up to 500 V.

Gradation of the diameter of the fuse cartridge pedestal-contact, in conjunction with correspondingly determined diameters for the gauge insert, for each rating stage, ensure that (above 6 A), no fuse can be inserted in the wrong base.



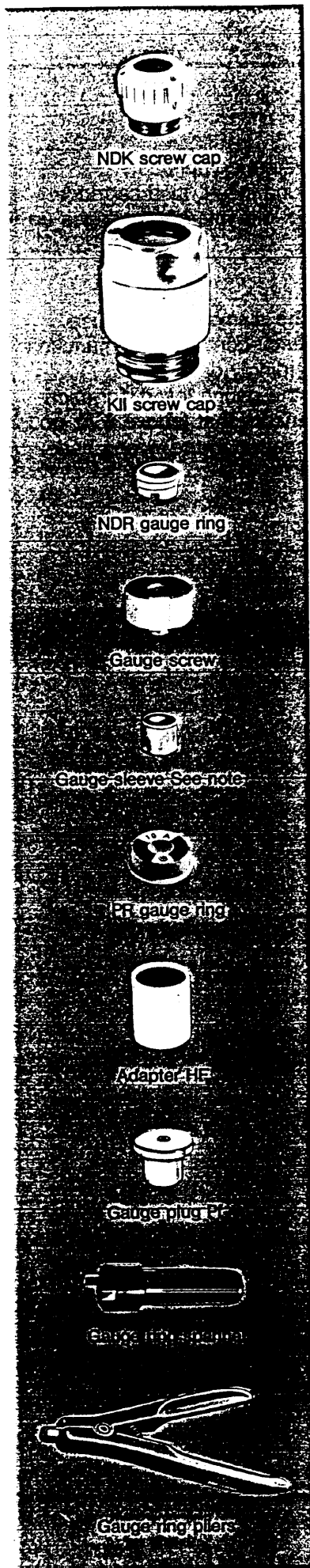
Operating class: gF (fast) to VDE 0635  
 Operating class: gL (slow) to VDE 0636  
 Operating class: gT (slow) to VDE 0635

## D fuse cartridges to DIN 49360 and DIN 49515



| Size               | Rated current | Thread    | Type            |           | Pack qty. | Weight 100 off, nett kg | Total length |      | ø        |
|--------------------|---------------|-----------|-----------------|-----------|-----------|-------------------------|--------------|------|----------|
|                    |               |           | Operating class |           |           |                         | a            | b    |          |
|                    | A             |           | gF              | gL/gT     |           |                         |              |      |          |
| NDz                | 0,5           | E 16      | gFNDz/0,5       | gTNDz/0,5 | 25        | 1,3                     | 50           | 12,8 |          |
|                    | 1             |           | gFNDz/1         | gTNDz/1   |           | 1,3                     |              |      |          |
|                    | 2             |           | gFNDz/2         | gTNDz/2   |           | 1,3                     |              |      |          |
|                    | 4             |           | gFNDz/4         | gTNDz/4   |           | 1,3                     |              |      |          |
|                    | 6             |           | gFNDz/6         | gTNDz/6   |           | 1,3                     |              |      |          |
|                    | 10            |           | gFNDz/10        | gTNDz/10  |           | 1,3                     |              |      |          |
|                    | 16            |           | gFNDz/16        | gTNDz/16  |           | 1,4                     |              |      |          |
|                    | 20            |           | gFNDz/20        | gTNDz/20  |           | 1,6                     |              |      |          |
|                    | 25            |           | gFNDz/25        | gTNDz/25  |           | 1,7                     |              |      |          |
|                    | DII           |           | 0,5             | E 27      |           | gFD2/0,5                |              |      | gLD2/0,5 |
| 1                  |               | gFD2/1    | gLD2/1          |           | 2,7       |                         |              |      |          |
| 2                  |               | gFD2/2    | gLD2/2          |           | 2,7       |                         |              |      |          |
| 4                  |               | gFD2/4    | gLD2/4          |           | 2,7       |                         |              |      |          |
| 6                  |               | gFD2/6    | gLD2/6          |           | 2,7       |                         |              |      |          |
| 10                 |               | gFD2/10   | gLD2/10         |           | 3,2       |                         |              |      |          |
| 10/6 <sup>1)</sup> |               | gFD2/10/6 | gLD2/10/6       |           | 3,2       |                         |              |      |          |
| 16                 |               | gFD2/16   | gLD2/16         |           | 3,2       |                         |              |      |          |
| 20                 |               | gFD2/20   | gLD2/20         |           | 3,2       |                         |              |      |          |
| 25                 |               | gFD2/25   | gLD2/25         |           | 3,6       |                         |              |      |          |
| DIII               | 35            | E 33      | gFD3/35         | gLD3/35   | 5         | 5,6                     | 50           | 28   |          |
|                    | 50            |           | gFD3/50         | gLD3/50   |           | 6,2                     |              |      |          |
|                    | 63            |           | gFD3/63         | gLD3/63   |           | 6,4                     |              |      |          |
| DIVH               | 80            | R 1 1/4"  | gFD4/80         | gLD4/80   | 10        | 13,4                    | 57,5         | 33,5 |          |
|                    | 100           |           | gFD4/100        | gLD4/100  |           | 13,4                    |              |      |          |
| DVH                | 125           | R 2"      | gFD5/125        | gTD5/125  | 10        | 23,2                    | 57,5         | 46   |          |
|                    | 160           |           | gFD5/160        | gTD5/160  |           | 24,2                    |              |      |          |
|                    | 200           |           | gFD5/200        | gTD5/200  |           | 34,8                    |              |      |          |

<sup>1)</sup> 10 A fuse cartridge with 6 A pedestal contact - without VDE mark.



### D screw caps to DIN 49 514 und DIN 49 360

| Size | Rated current | Thread | Test hole | Type | Pack qty. | Weight per hundred approx. kg |
|------|---------------|--------|-----------|------|-----------|-------------------------------|
| A    |               |        |           |      |           |                               |

#### Thread; nickel plated brass

|      |     |          |         |     |    |      |
|------|-----|----------|---------|-----|----|------|
| NDz  | 25  | E 16     | without | NDK | 25 | 2,3  |
| DII  | 25  | E 27     | with    | K2  | 25 | 5,0  |
| DIII | 63  | E 33     | with    | K3  | 25 | 8,4  |
| DIVH | 100 | R 1 1/4" | without | K4  | 10 | 21,0 |
| DVH  | 200 | R 2"     | without | K5  | 10 | 34,0 |

#### Thread; silver plated copper

|      |    |      |         |        |    |     |
|------|----|------|---------|--------|----|-----|
| NDz  | 25 | E 16 | without | NDK/Cu | 25 | 2,3 |
| DII  | 25 | E 27 | with    | K2/Cu  | 25 | 5,0 |
| DIII | 63 | E 33 | with    | K3/Cu  | 25 | 8,4 |

### D gauge inserts to DIN 49 360 und DIN 49 516

| Size | For fuse cartridge | Fuse base thread | Type | Pack qty. | Weight per hundred approx. kg |
|------|--------------------|------------------|------|-----------|-------------------------------|
| A    |                    |                  |      |           |                               |

#### Gauge rings

|     |    |      |       |    |      |
|-----|----|------|-------|----|------|
| NDz | 2  | E 16 | NDR2  | 50 | 0,28 |
|     | 4  |      | NDR4  |    | 0,28 |
|     | 6  |      | NDR6  |    | 0,28 |
|     | 10 |      | NDR10 |    | 0,28 |
|     | 20 |      | NDR16 |    | 0,28 |
|     | 20 |      | NDR20 |    | 0,11 |

#### Gauge screws

|      |    |       |       |    |     |
|------|----|-------|-------|----|-----|
| DII  | 2  | E 27  | S2/2  | 25 | 1,3 |
|      | 4  |       | S2/4  |    | 1,3 |
|      | 6  |       | S2/6  |    | 1,3 |
|      | 10 |       | S2/10 |    | 1,3 |
|      | 16 |       | S2/16 |    | 1,3 |
|      | 20 |       | S2/20 |    | 1,2 |
| DIII | 25 | S2/25 | 1,2   |    |     |
|      | 35 | E 33  | S3/35 | 25 | 2,1 |
|      | 50 |       | S3/50 |    | 1,9 |
|      | 63 |       | S3/63 |    | 1,7 |

#### Gauge Sleeve

|      |     |          |        |    |     |
|------|-----|----------|--------|----|-----|
| DIVH | 80  | R 1 1/4" | H4/80  | 50 | 0,5 |
|      | 100 |          | H4/100 |    | 0,5 |
| DVH  | 125 | R 2"     | H5/125 | 50 | 0,6 |
|      | 160 |          | H5/160 |    | 0,6 |
|      | 200 |          | H5/200 |    | 0,5 |

### D gauge rings to DIN 49 362 for fuse bases without gauge screws

|      |    |      |        |    |      |
|------|----|------|--------|----|------|
| DII  | 6  | E 27 | PR2/6  | 50 | 0,40 |
|      | 10 |      | PR2/10 |    |      |
|      | 16 |      | PR2/16 |    |      |
|      | 20 |      | PR2/20 |    |      |
| DIII | 35 | E 33 | PR3/35 | 50 | 0,43 |
|      | 50 |      | PR3/50 |    |      |

Adapters are necessary when the cartridge being used is of a lower rating than the fuse base.

| Size | For fuse cartridge | In screw cap | Thread   | Type | Pack qty. | Weight per hundred approx. kg |
|------|--------------------|--------------|----------|------|-----------|-------------------------------|
| NDz  | NDz                | KII          | E 27     | HFZ  | 100       | 1,65                          |
| DII  | DII                | KIII         | E 33     | HF2  | 100       | 1,55                          |
| DIII | DIII               | KIV          | R 1 1/4" | HF3  | 100       | 1,90                          |
| DIVH | DIVH               | KV           | R 2"     | HF4  | 100       |                               |

#### Gauge plug - for fitting DIII fuses (35-63 A) in DIVH fuse bases

|   |  |  |          |    |   |     |
|---|--|--|----------|----|---|-----|
| - |  |  | R 1 1/4" | PF | 1 | 2,5 |
|---|--|--|----------|----|---|-----|

#### Gauge ring spanner

|   |  |  |  |     |   |     |
|---|--|--|--|-----|---|-----|
| - |  |  |  | PSS | 1 | 4,4 |
|---|--|--|--|-----|---|-----|

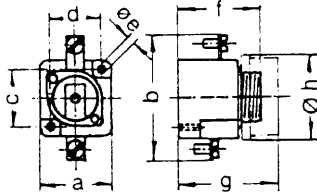
#### Gauge ring pliers

|   |  |  |  |     |   |     |
|---|--|--|--|-----|---|-----|
| - |  |  |  | PRZ | 1 | 3,5 |
|---|--|--|--|-----|---|-----|

**D fuse bases to DIN 49 510, 49 511 and 49 325**  
**D single-pole flush-mounting fuse bases, for separate mounting**

| Size | Rated current | Thread   | Type of terminal | Shroud  | Type           | Pack qty. | Weight % approx. kg |
|------|---------------|----------|------------------|---------|----------------|-----------|---------------------|
| A    |               |          |                  |         |                |           |                     |
| NDz  | 25            | E 16     | Screw tab        | without | <b>NEZ 25</b>  | 20        | 5,4                 |
| NDz  | 25            | E 16     | Screw tab        | with    | <b>NEZ 25R</b> | 20        | 6,4                 |
| DII  | 25            | E 27     | Screw tab        | without | <b>EZ 25</b>   | 12        | 7,8                 |
| DII  | 25            | E 27     | Screw tab        | with    | <b>EZ 25R</b>  | 12        | 8,8                 |
| DIII | 63            | E 33     | Screw tab        | without | <b>EZ 60</b>   | 10        | 15,4                |
| DIII | 63            | E 33     | Screw tab        | with    | <b>EZ 60R</b>  | 10        | 18,0                |
| DIVH | 100           | R 1 1/4" | Screw tab        | without | <b>EZ 100</b>  | 6         | 32,8                |
| DIVH | 100           | R 1 1/4" | Screw tab        | with    | <b>EZ 100R</b> | 6         | 34,8                |
| DVH  | 200           | R 2"     | Screw tab        | without | <b>EZ 200</b>  | 4         | 62,2                |
| DVH  | 200           | R 2"     | Screw tab        | with    | <b>EZ 200R</b> | 4         | 74,6                |

**Dimensions in mm**

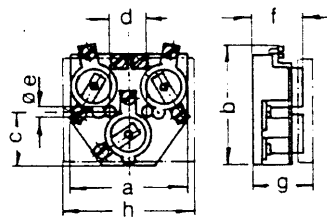


|         | a    | b   | c    | d    | ∅e  | f  | g    | ∅h   |
|---------|------|-----|------|------|-----|----|------|------|
| NEZ R   | 33   | 56  | 25   | 25   | 4,5 | 44 | 52,5 | 33   |
| EZ 25R  | 37,5 | 66  | 30   | 27   | 5,6 | 44 | 52,5 | 46   |
| EZ 60R  | 46   | 82  | 35,5 | 35,5 | 5,5 | 47 | 55   | 54,5 |
| EZ 100R | 62   | 105 | 47   | 47   | 6   | 60 | 68   | 71   |
| EZ 200R | 81   | 135 | 65   | 65   | 8   | 62 | 74   | 96   |

**D three-pole flush mounting fuse bases, with neutral terminal**

|      |    |      |           |         |                   |   |      |
|------|----|------|-----------|---------|-------------------|---|------|
| NDz  | 25 | E 16 | Screw tab | without | <b>NEZ 25/3</b>   | 2 | 32,6 |
| NDz  | 25 | E 16 | Screw tab | with    | <b>NEZ 25/3/A</b> | 2 | 33,8 |
| DII  | 25 | E 27 | Screw tab | without | <b>EZ 25/3</b>    | 8 | 31,6 |
| DII  | 25 | E 27 | Screw tab | with    | <b>EZ 25/3/A</b>  | 8 | 37   |
| DIII | 63 | E 33 | Screw tab | without | <b>EZ 60/3</b>    | 8 | 48   |
| DIII | 63 | E 33 | Screw tab | with    | <b>EZ 60/3/A</b>  | 8 | 54,4 |

**Dimensions in mm**

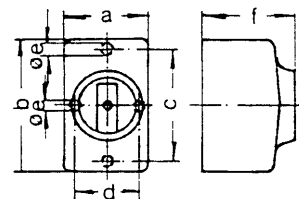


|            | a   | b   | c    | d  | ∅e  | f  | g  | h   |
|------------|-----|-----|------|----|-----|----|----|-----|
| NEZ 25/3/A | 64  | 90  | 30   | 39 | 4,5 | 48 | 54 | 68  |
| EZ 25/3/A  | 94  | 94  | 44   | 32 | 5   | 44 | 52 | 94  |
| EZ 60/3/A  | 102 | 106 | 45,5 | 32 | 5   | 44 | 52 | 113 |

**D single-pole universal fuse bases**

|      |    |      |           |      |               |    |      |
|------|----|------|-----------|------|---------------|----|------|
| NDz  | 25 | E 16 | Screw tab | with | <b>NUZ 25</b> | 10 | 19,4 |
| DII  | 25 | E 27 | Screw tab | with | <b>UZ 25</b>  | 10 | 17,8 |
| DIII | 63 | E 33 | Screw tab | with | <b>UZ 60</b>  | 8  | 38,2 |

**Dimensions in mm**

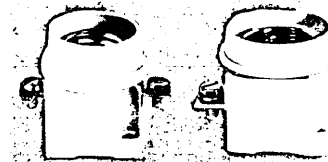


|        | a  | b   | c  | d  | ∅e | f  |
|--------|----|-----|----|----|----|----|
| NUZ 25 | 45 | 71  | 61 | -  | 4  | 50 |
| UZ 25  | 41 | 73  | -  | 33 | 5  | 50 |
| UZ 60  | 65 | 100 | -  | 48 | 5  | 63 |

**D single and triple-pole surface mounting fuse bases**

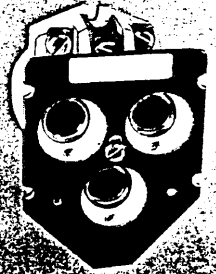
| Size | Rated current | Thread | Type of terminal | Gauge fitting | Transp. shroud | Type              | Pack qty. | Weight % approx. kg |
|------|---------------|--------|------------------|---------------|----------------|-------------------|-----------|---------------------|
| A    |               |        |                  |               |                |                   |           |                     |
| DII  | 1x25          | E 27   | Screw tab        | gauge screw   | with           | <b>S 27-1/h/p</b> | 10        | 7,6                 |
| DII  | 1x25          | E 27   | Screw tab        | gauge ring    | with           | <b>S 27-1/h</b>   | 10        | 7,6                 |
| DIII | 1x63          | E 33   | Screw tab        | gauge screw   | without *      | <b>S 33-1/p</b>   | 10        | 12,2                |
| DIII | 1x63          | E 33   | Screw tab        | gauge ring    | without *      | <b>S 33-1</b>     | 10        | 12,2                |
| DII  | 3x25          | E 27   | Screw tab        | gauge screw   | with           | <b>S 27/p</b>     | 4         | 28,2                |
| DII  | 3x25          | E 27   | Screw tab        | gauge ring    | with           | <b>S 27</b>       | 4         | 28,2                |
| DIII | 3x63          | E 33   | Screw tab        | gauge screw   | with           | <b>S 33/p</b>     | 4         | 44,2                |
| DIII | 3x63          | E 33   | Screw tab        | gauge ring    | with           | <b>S 33</b>       | 4         | 44,2                |

\* Available with protective collar, dimensions: see back page

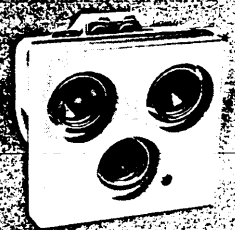


EZ 25 R

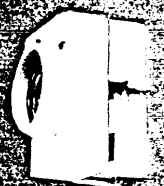
EZ 100 R



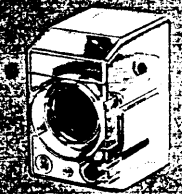
NEZ 25/3/A



EZ 25/3/A



UZ 25



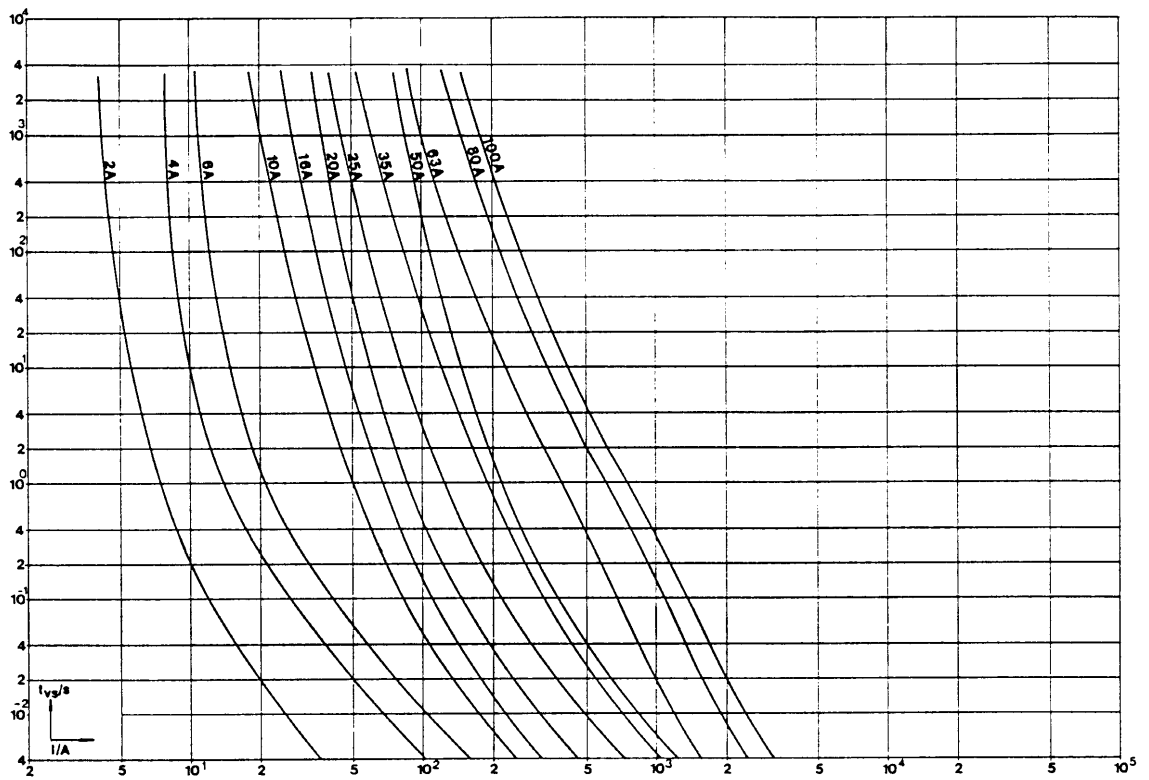
S 27-1/h



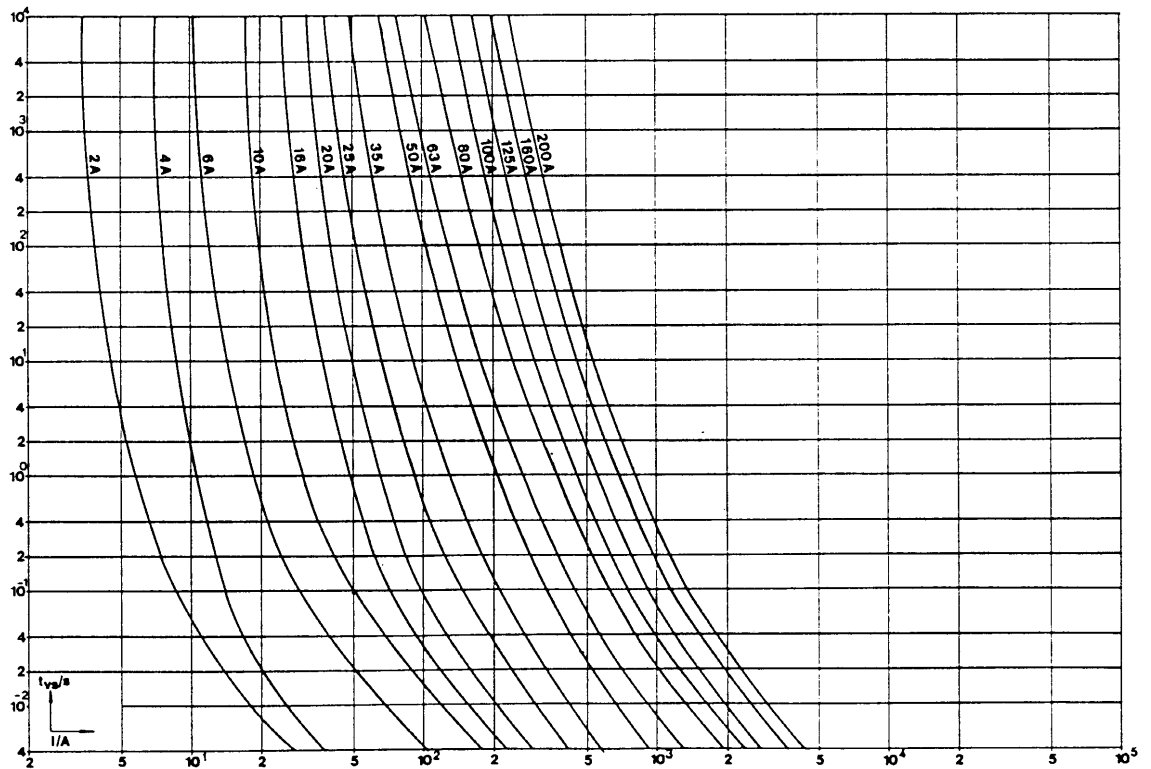
S 33

## Technical data

Time/current characteristics (tolerance;  $\pm 5\%$  in direction of current flow)  
D fuse cartridges, 500 V (operating class gL)



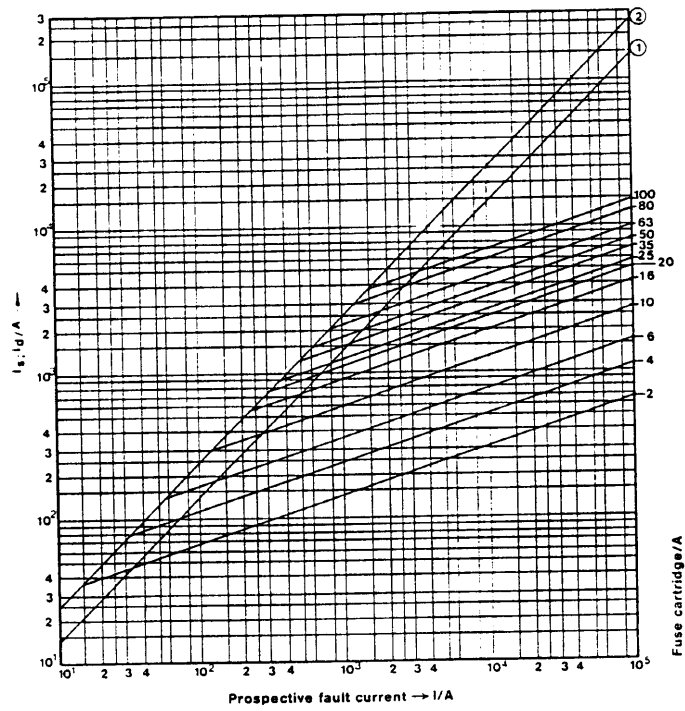
D fuse cartridges, 500 V (fast)



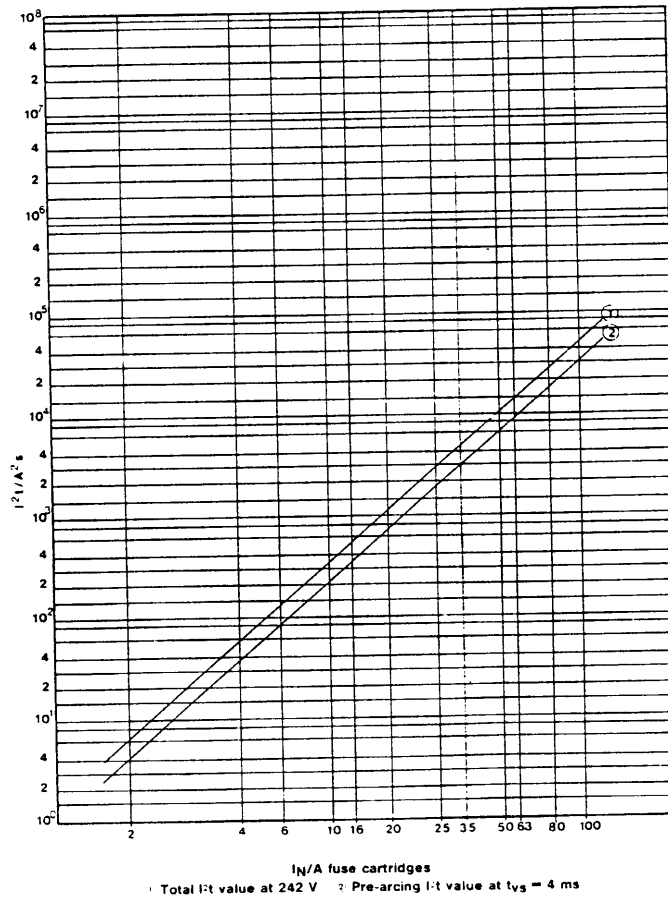
Further technical data on "fast characteristic" D fuse cartridges 500 V, on request.

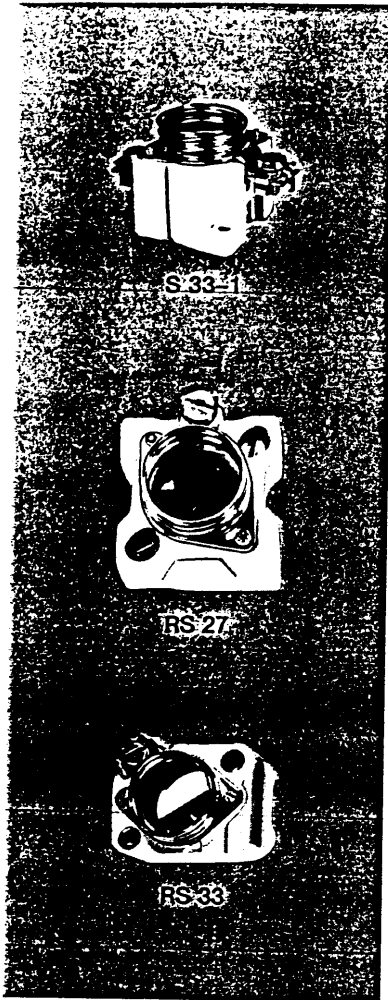
## Cut-off characteristics D fuse cartridges 500 V (operating class gL)

- 1 Peak asymmetrical short-circuit current without d.c. aperiodic component
- 2 Peak asymmetrical short-circuit current with largest d.c. aperiodic component



## I<sup>2</sup>t values D fuse cartridges 500 V (operating class gL)



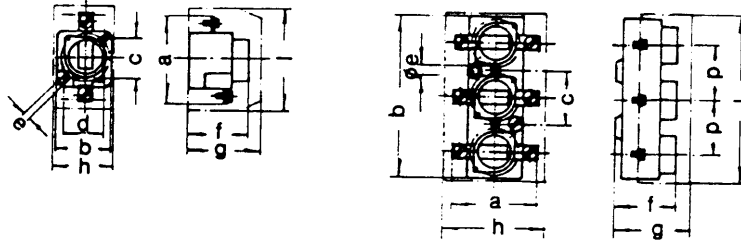


Dimensions in mm

D surface mounting fuse bases

single-pole

three-pole

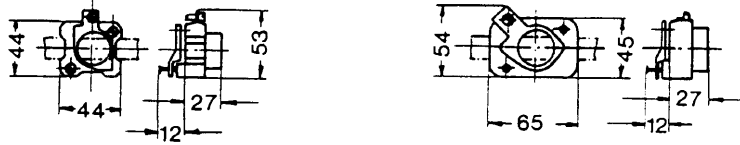


|            | a  | b   | c  | d  | e   | f  | g  | h  | i   | p  |
|------------|----|-----|----|----|-----|----|----|----|-----|----|
| S 27-1/h/p | 58 | 37  | 30 | 27 | 4,5 | 45 | 53 | 43 | 74  | -  |
| S 33-1/p   | 79 | 45  | 34 | 34 | 4,5 | 45 | 53 | -  | ∅55 | -  |
| S 27/p     | 58 | 117 | 41 | -  | 4,5 | 45 | 53 | 76 | 123 | 41 |
| S 33/p     | 79 | 144 | 50 | -  | 4,5 | 45 | 53 | 97 | 150 | 50 |

D busbar mounting fuse bases  
for multiple fitting on busbars

| Size | Rated current | Thread | Terminal  | Gauge fitting | Busbar size | Type        | Pack qty. | Weight per hundred approx. kg |
|------|---------------|--------|-----------|---------------|-------------|-------------|-----------|-------------------------------|
| A    |               |        |           |               |             |             |           |                               |
| DII  | 25            | E 27   | Screw tab | Gauge ring    | 16x4        | RS 27 - 1x4 | 10        | 8                             |
| DII  | 25            | E 27   | Screw tab | Gauge ring    | 16x8        | RS 27 - 1x8 | 10        | 8                             |
| DIII | 63            | E 33   | Screw tab | Gauge ring    | 16x4        | RS 33 - 1x4 | 2         | 10,2                          |
| DIII | 63            | E 33   | Screw tab | Gauge ring    | 16x8        | RS 33 - 1x8 | 2         | 10,2                          |

Dimensions in mm



Power losses

D fuses 500 V (operating class gL)

