

# NH KNIFE BLADE

NH fuses are typically used for power distribution applications and to protect large electrical devices such as motors, drives, etc. They are available in seven sizes with a current range of 2 to 1600 Amps.

NH fuses have knife blades at both ends, which mount into Fuse Bases. Fuse Bases are available in one or three pole designs and can be panel or DIN rail mounted.

Please refer to pg 19 for NH Fuse Accessories.

## Operating Classes

### gL/gG - Line Protection

Slow, typically used for distribution circuits or resistive loads.

Typical Marking: gL/gG



### aM - Motor Protection

Fast acting short circuit protection, but slow acting overload protection.

Typical Marking: aM  
Green imprint.

### aR - Semiconductor Protection

Partial range, short circuit protection for devices such as diodes, SCRs, etc.

Typical Markings: Ultra Rapid™, Sitor™, Silcu™, Protistor™, Reticur™, Ultra Quick™, aR,

### gR - Semiconductor Protection

Full range overload and short circuit protection for devices such as diodes, SCRs, etc.

Typical Markings: Ultra Rapid™, Sitor™, Silcu™, Protistor™, Reticur™, Ultra Quick™, gR,  
Mostly red, orange or blue imprint.



## NH00 (NHC00)<sup>3</sup>

### Ordering Information

Operating Class gL / gG  
(VDE 0636 / IEC 269)  
Line Protection up to 500V AC  
(660V available)

Current/Voltage	Cat. No.	Dim.	Std. Pk.
2/500V AC	2NH00GL	A	3
4/500V AC	4NH00GL	A	3
6/500V AC	6NH00GL	A	3
10/500V AC	10NH00GL	A	3
16/500V AC	16NH00GL	A	3
20/500V AC	20NH00GL	A	3
25/500V AC	25NH00GL	A	3
32/500V AC	32NH00GL	A	3
35/500V AC	35NH00GL	A	3
40/500V AC	40NH00GL	A	3
50/500V AC	50NH00GL	A	3
63/500V AC	63NH00GL	A	3
80/500V AC	80NH00GL	A	3
100/500V AC	100NH00GL	A	3
125/500V AC	125NH00GL	A	3
160/500V AC	160NH00GL	A	3

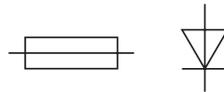
NH00 Fuses Operating Class gL / gG are available in 660V, and with insulated tags.

Operating Class aM  
(VDE 0636 / IEC 269)  
Motor Protection up to 660V AC

2/660V AC	2NH00AM-6	A	3
4/660V AC	4NH00AM-6	A	3
6/660V AC	6NH00AM-6	A	3
10/660V AC	10NH00AM-6	A	3
16/660V AC	16NH00AM-6	A	3
20/660V AC	20NH00AM-6	A	3
25/660V AC	25NH00AM-6	A	3
32/660V AC	32NH00AM-6	A	3
35/660V AC	35NH00AM-6	A	3
40/660V AC	40NH00AM-6	A	3
50/660V AC	50NH00AM-6	A	3
63/660V AC	63NH00AM-6	A	3
80/660V AC	80NH00AM-6	A	3
100/660V AC	100NH00AM-6	A	3
125/500V AC	125NH00AM	A	3
160/500V AC	160NH00AM	A	3

Super Fast Blow Operating Class aR / gR  
(VDE 0636 / IEC 269)  
Semiconductor Protection up to 660V AC  
(1000V available)

16/660V AC	16NH00GR-6 <sup>1</sup>	A	3
20/660V AC	20NH00GR-6 <sup>1</sup>	A	3
25/660V AC	25NH00GR-6 <sup>1</sup>	A	3
32/660V AC	32NH00GR-6 <sup>1</sup>	A	3
35/660V AC	35NH00GR-6 <sup>1</sup>	A	3
40/660V AC	40NH00GR-6 <sup>1</sup>	A	3
50/660V AC	50NH00GR-6 <sup>1</sup>	A	3
63/660V AC	63NH00GR-6 <sup>1</sup>	A	3
80/660V AC	80NH00GR-6 <sup>1</sup>	A	3
100/660V AC	100NH00GR-6 <sup>1</sup>	A	3
125/660V AC	125NH00GR-6 <sup>1</sup>	A	3
160/660V AC	160NH00AR-6	A	3

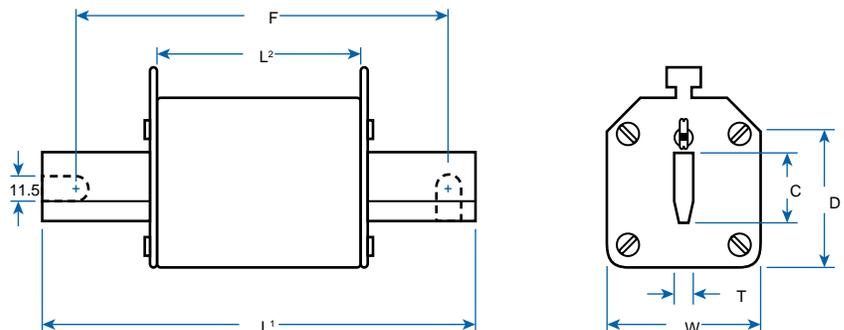


<sup>1</sup> Also available in Operating Class aR.

<sup>2</sup> Also available in 1000V. Designate suffix "-1" (ex. 32NH0GR-1).

<sup>3</sup> Size NHC00 will be supplied in place of NH00 at manufacturer discretion.

<sup>4</sup> Knife blade is available with screw holes, please designate a "B" after the size, (ex. 250NH3BAR-6).





**NH0**



**NH1**



**NH2**

Current/ Voltage	Cat. No.	Dim.	Std. Pk.	Current/ Voltage	Cat. No.	Dim.	Std. Pk.	Current/ Voltage	Cat. No.	Dim.	Std. Pk.
10/500V AC	10NH0GL	B	3	16/500V AC	16NH1GL	C	3	35/500V AC	35NH2GL	E	3
16/500V AC	16NH0GL	B	3	20/500V AC	20NH1GL	C	3	40/500V AC	40NH2GL	E	3
20/500V AC	20NH0GL	B	3	25/500V AC	25NH1GL	C	3	50/500V AC	50NH2GL	E	3
25/500V AC	25NH0GL	B	3	32/500V AC	32NH1GL	C	3	63/500V AC	63NH2GL	E	3
32/500V AC	32NH0GL	B	3	35/500V AC	35NH1GL	C	3	80/500V AC	80NH2GL	E	3
35/500V AC	35NH0GL	B	3	40/500V AC	40NH1GL	C	3	100/500V AC	100NH2GL	E	3
40/500V AC	40NH0GL	B	3	50/500V AC	50NH1GL	C	3	125/500V AC	125NH2GL	E	3
50/500V AC	50NH0GL	B	3	63/500V AC	63NH1GL	C	3	160/500V AC	160NH2GL	E	3
63/500V AC	63NH0GL	B	3	80/500V AC	80NH1GL	C	3	200/500V AC	200NH2GL	E	3
80/500V AC	80NH0GL	B	3	100/500V AC	100NH1GL	C	3	224/500V AC	224NH2GL	E	3
100/500V AC	100NH0GL	B	3	125/500V AC	125NH1GL	C	3	250/500V AC	250NH2GL	E	3
125/500V AC	125NH0GL	B	3	160/500V AC	160NH1GL	C	3	300/500V AC	300NH2GL	E	3
160/500V AC	160NH0GL	B	3	200/500V AC	200NH1GL	D	3	315/500V AC	315NH2GL	F	3
200/500V AC	200NH0GL	B	3	224/500V AC	224NH1GL	D	3	355/500V AC	355NH2GL	F	3
				250/500V AC	250NH1GL	D	3	400/500V AC	400NH2GL	F	3
								425/500V AC	425NH2GL	F	3
10/500V AC	10NH0AM	B	3	16/500V AC	16NH1AM	C	3	35/500V AC	35NH2AM	E	3
16/500V AC	16NH0AM	B	3	20/500V AC	20NH1AM	C	3	40/500V AC	40NH2AM	E	3
20/500V AC	20NH0AM	B	3	25/500V AC	25NH1AM	C	3	50/500V AC	50NH2AM	E	3
25/500V AC	25NH0AM	B	3	32/500V AC	32NH1AM	C	3	63/500V AC	63NH2AM	E	3
32/500V AC	32NH0AM	B	3	35/500V AC	35NH1AM	C	3	80/500V AC	80NH2AM	E	3
35/500V AC	35NH0AM	B	3	40/500V AC	40NH1AM	C	3	100/500V AC	100NH2AM	E	3
40/500V AC	40NH0AM	B	3	50/500V AC	50NH1AM	C	3	125/500V AC	125NH2AM	E	3
50/500V AC	50NH0AM	B	3	63/500V AC	63NH1AM	C	3	160/500V AC	160NH2AM	E	3
63/500V AC	63NH0AM	B	3	80/500V AC	80NH1AM	C	3	200/500V AC	200NH2AM	E	3
80/500V AC	80NH0AM	B	3	100/500V AC	100NH1AM	C	3	224/500V AC	224NH2AM	E	3
100/500V AC	100NH0AM	B	3	125/500V AC	125NH1AM	C	3	250/500V AC	250NH2AM	E	3
125/500V AC	125NH0AM	B	3	160/500V AC	160NH1AM	C	3	315/500V AC	315NH2AM	F	3
160/500V AC	160NH0AM	B	3	200/500V AC	200NH1AM	D	3	355/500V AC	355NH2AM	F	3
				224/500V AC	224NH1AM	D	3	400/500V AC	400NH2AM	F	3
				250/500V AC	250NH1AM	D	3				
16/660V AC	16NH0GR-6	B	3	16/660V AC	16NH1GR-6	C	3	32/660V AC	32NH2GR-6	E	3
20/660V AC	20NH0GR-6	B	3	20/660V AC	20NH1GR-6	C	3	40/660V AC	40NH2GR-6	E	3
25/660V AC	25NH0GR-6	B	3	25/660V AC <sup>2</sup>	25NH1GR-6 <sup>4</sup>	C	3	50/660V AC	50NH2GR-6	E	3
32/660V AC <sup>2</sup>	32NH0GR-6	B	3	32/660V AC <sup>2</sup>	32NH1GR-6 <sup>4</sup>	C	3	63/660V AC	63NH2GR-6	E	3
40/660V AC <sup>2</sup>	40NH0GR-6	B	3	35/660V AC <sup>2</sup>	35NH1GR-6 <sup>4</sup>	C	3	80/660V AC	80NH2GR-6 <sup>4</sup>	E	3
50/660V AC <sup>2</sup>	50NH0GR-6	B	3	40/660V AC <sup>2</sup>	40NH1GR-6 <sup>4</sup>	C	3	100/660V AC	100NH2GR-6 <sup>4</sup>	E	3
63/660V AC <sup>2</sup>	63NH0GR-6	B	3	50/660V AC <sup>2</sup>	50NH1GR-6 <sup>4</sup>	C	3	125/660V AC	125NH2GR-6 <sup>4</sup>	E	3
80/660V AC <sup>2</sup>	80NH0GR-6	B	3	63/660V AC <sup>2</sup>	63NH1GR-6 <sup>4</sup>	C	3	160/660V AC	160NH2AR-6 <sup>4</sup>	E	3
100/660V AC <sup>2</sup>	100NH0GR-6	B	3	80/660V AC <sup>2</sup>	80NH1GR-6 <sup>4</sup>	C	3	200/660V AC	200NH2AR-6 <sup>4</sup>	E	3
125/660V AC <sup>2</sup>	125NH0GR-6	B	3	100/660V AC <sup>2</sup>	100NH1GR-6 <sup>4</sup>	C	3	250/660V AC	250NH2AR-6 <sup>4</sup>	E	3
160/660V AC <sup>2</sup>	160NH0AR-6	B	3	125/660V AC <sup>2</sup>	125NH1GR-6 <sup>4</sup>	C	3	280/660V AC	280NH2AR-6 <sup>4</sup>	E	3
				160/660V AC <sup>2</sup>	160NH1AR-6 <sup>4</sup>	C	3	315/660V AC	315NH2AR-6 <sup>4</sup>	F	3
				200/660V AC <sup>2</sup>	200NH1AR-6 <sup>4</sup>	D	3	355/660V AC	355NH2AR-6 <sup>4</sup>	E	3
				224/660V AC <sup>2</sup>	224NH1AR-6 <sup>4</sup>	D	3	400/660V AC	400NH2AR-6 <sup>4</sup>	F	3
				250/660V AC <sup>2</sup>	250NH1AR-6 <sup>4</sup>	D	3				
				315/500V AC	315NH1AR	D	3				

**Approximate Dimensions for NH Fuses mm (in.)\***

NH Size/Dim.	Overall Length (L <sub>1</sub> )	Body Length (L <sub>2</sub> )	Body Depth (D)	Body Width (W)	Blade Width (T)	Blade Thickness (C)	Fixing Center (F)
C00	79(3.11)	53(2.09)	40(1.57)	21(0.83)	6(0.24)	15(0.59)	110(4.33)
00/A	79(3.11)	52(2.05)	42.5(1.67)	28(1.10)	6(0.24)	15(0.59)	110(4.33)
0/B	125(4.92)	65(2.56)	42(1.65)	29(1.14)	6(0.24)	15(0.59)	110(4.33)
1/C	135(5.31)	65(2.56)	42(1.65)	29(1.14)	6(0.24)	15(0.59)	110(4.33)
1/D	135(5.31)	65(2.56)	48(1.89)	40(1.57)	6(0.24)	20(0.79)	110(4.33)
2/E	150(5.91)	65(2.56)	48(1.89)	40(1.57)	6(0.24)	20(0.79)	110(4.33)
2/F	150(5.91)	65(2.56)	60(2.36)	53(2.10)	6(0.24)	26(1.02)	110(4.33)

\*Dimensions to DIN 43620 refer to diagram on pg 16



## NH FUSE ACCESSORIES

### FUSE BASE

Fuse Bases hold fuses in place and insure proper electrical connections. Available in one or three pole designs. Three-pole Fuse Bases are supplied with two Separator Plates which should be installed between poles. We recommend the use of End Plates and Terminal Covers for increased safety.

### END PLATE

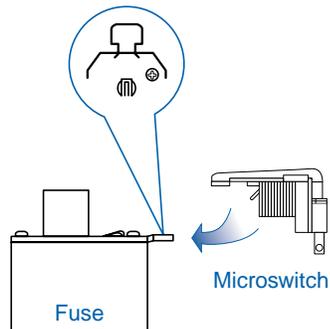
End Plates increase safety and provide separation between devices. Install by inserting End Plate into mounting entry slot on right or left side of Fuse Base. We recommend installing one End Plate on each side of the Fuse Base.

### TERMINAL COVER

Covers increase safety by covering the conducting metal hardware of the Fuse Base and the Fuse. We suggest Terminal Covers be used in conjunction with End Plates. To install slide Terminal Cover over terminal slot and snap in place.

### MICROSWITCH

Microswitches can be field mounted on NH fuses for remote blown fuse indication. (Sketch below)



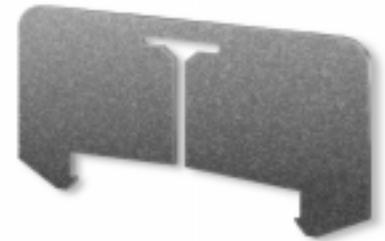
### FUSE HANDLE

We strongly suggest using the Fuse Handle when inserting or removing fuses from the Fuse Base to prevent electrical shocks. For increased safety, use Fuse Handle with integral safety glove. Both Fuse Handles are for use with NH-Knife Blade Fuses, NH00 - NH4.



Fuse Base

No. of Poles	Cat. No.	Length mm (in.)	Use With Fuse(s)
1	<b>NHB00-1</b>	122 (4.80)	NH00
3	<b>NHB00-3</b>	139 (5.47)	NH00
1	<b>NHB0-1</b>	170 (6.69)	NH0
1	<b>NHB1-1</b>	202 (7.95)	NH1
3	<b>NHB1-3</b>	214 (8.42)	NH1
1	<b>NHB2-1</b>	227 (8.94)	NH2
3	<b>NHB2-3</b>	260 (10.24)	NH2
1	<b>NHB3-1</b>	242 (9.53)	NH3
1	<b>NHB4-1</b>	310 (12.20)	NH4
1	<b>NHB4A-1</b>	338 (13.31)	NH4A
1	<b>NHSMB</b>	146 (5.75)	NH00SM



Fuse End Plate

Cat. No.	Approx. Dim. mm (in.)	Use With Fuse Base(s)
	Width Length	
<b>NHEP00</b>	62 (2.44) 121 (4.76)	NHB00-1-3
<b>NHEP0</b>	62 (2.44) 180 (7.09)	NHB0-1-3
<b>NHEP1</b>	62 (2.44) 214 (8.42)	NHB1-1-3
<b>NHEP2</b>	90 (3.54) 260 (10.24)	NHB2-1-3
<b>NHEP3</b>	101 (3.98) 242 (9.53)	NHB3-1-3



Microswitch

Cat. No.	Current/Voltage	Use With Fuse(s)
<b>NHMS</b>	5/250V AC (SPDT)	NH Knife Blade or NH Stud Mount (All Sizes)



Terminal Cover

Cat. No.	Use With Fuse Base(s)
<b>NHTC00</b>	NHB00-1-3



Fuse Handle

Cat. No.	Description
<b>NHHA</b>	Fuse Handle
<b>NHSG</b>	Fuse Handle with Safety Glove

For maximum protection use Fuse Handle with integral safety glove, not shown.

## NH STUD MOUNT Semiconductor

Semiconductor Fuses have extremely fast acting trip characteristics and provide short circuit and overload protection for diodes, SCR's etc. Current limiting, super fast blow.

Semiconductor Fuses offered comply with IEC, DIN and VDE standards and are available in two trip characteristics, defined below.

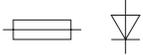
For Accessories, please refer to pg 19 for NH Fuses.

### Operating Classes (VDE 0636 / IEC 269)

#### gR - Full Range Protection

Overload and short circuit protection.

Typical Markings: *Ultra Rapid™, Silcu™, Recticur™, Protistor™, Ultra Quick™, gR*



Mostly red, orange, or blue imprint.

#### aR - Partial Range Protection

Short circuit protection only. Faster acting than full range fuses.

Typical Markings: *Ultra Rapid™, Silcu™, Recticur™, Protistor™, Ultra Quick™, aR*



Mostly red, orange, or blue imprint.



**NH00C/SM**  
Stud Mount



**NH00C/SM-L**  
Stud Mount with  
Microswitch Holder

#### Class gR

Current/ Voltage	Cat. No.	Std. Pk.
16/660V AC	16SM00CGR	3
20/660V AC	20SM00CGR	3
25/660V AC	25SM00CGR	3
32/660V AC	32SM00CGR	3
40/660V AC <sup>1</sup>	40SM00CGR	3
50/660V AC <sup>1</sup>	50SM00CGR	3
63/660V AC <sup>1</sup>	63SM00CGR	3
80/660V AC <sup>1</sup>	80SM00CGR	3
100/660V AC <sup>1</sup>	100SM00CGR	3
125/660V AC <sup>1</sup>	125SM00CGR	3

#### Class gR

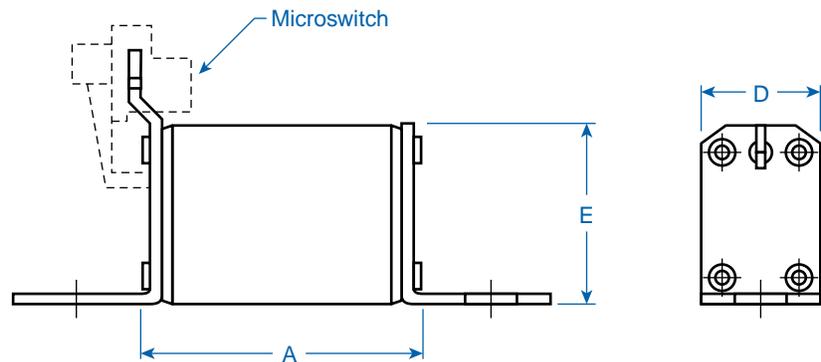
Current/ Voltage	Cat. No.	Std. Pk.
16/660V AC	16SM00CGR-L	3
20/660V AC	20SM00CGR-L	3
25/660V AC	25SM00CGR-L	3
32/660V AC	32SM00CGR-L	3
35/660V AC	35SM00CGR-L	3
40/660V AC	40SM00CGR-L	3
50/660V AC	50SM00CGR-L	3
63/660V AC	63SM00CGR-L	3
80/660V AC	80SM00CGR-L	3
100/660V AC	100SM00CGR-L	3
125/660V AC	125SM00CGR-L	3

#### Class aR

Current/ Voltage	Cat. No.	Std. Pk.
160/660V AC <sup>1</sup>	160SM00CAR	3
200/660V AC <sup>1</sup>	200SM00CAR	3
250/660V AC <sup>1</sup>	250SM00CAR	3
315/500V AC <sup>1</sup>	315SM00CAR	3

#### Class aR

Current/ Voltage	Cat. No.	Std. Pk.
160/660V AC	160SM00CAR-L	3
180/660V AC	180SM00CAR-L	3



<sup>1</sup> UL recognized version available upon request. UL rated at 700VAC.

<sup>2</sup> Also available in operating class aR.



**NH00/SM**  
Stud Mount

**Class gR**

Current/ Voltage	Cat. No.	Std. Pk.
16/660V AC <sup>2</sup>	16SM00GR	3
20/660V AC <sup>2</sup>	20SM00GR	3
25/660V AC <sup>2</sup>	25SM00GR	3
32/660V AC <sup>2</sup>	32SM00GR	3
35/660V AC <sup>2</sup>	35SM00GR	3
40/660V AC <sup>2</sup>	40SM00GR	3
50/660V AC <sup>2</sup>	50SM00GR	3
63/660V AC <sup>2</sup>	63SM00GR	3
80/660V AC <sup>2</sup>	80SM00GR	3
100/660V AC <sup>2</sup>	100SM00GR	3
125/660V AC <sup>2</sup>	125SM00GR	3

**Class aR**

160/660V AC <sup>1</sup>	160SM00AR	3
200/660V AC <sup>1</sup>	200SM00AR	3
250/660V AC <sup>1</sup>	250SM00AR	3
315/660V AC <sup>1</sup>	315SM00AR	3
350/660V AC <sup>1</sup>	350SM00AR	3
400/660V AC	400SM00AR	3



**NH00/SM-L**  
Stud Mount with  
Microswitch Holder

**Class gR**

Current/ Voltage	Cat. No.	Std. Pk.
6/660V AC <sup>2</sup>	6SM00GR-L	3
10/660V AC <sup>2</sup>	10SM00GR-L	3
16/660V AC <sup>2</sup>	16SM00GR-L	3
20/660V AC <sup>2</sup>	20SM00GR-L	3
25/660V AC <sup>2</sup>	25SM00GR-L	3
32/660V AC <sup>2</sup>	32SM00GR-L	3
35/660V AC <sup>2</sup>	35SM00GR-L	3
40/660V AC <sup>2</sup>	40SM00GR-L	3
50/660V AC <sup>2</sup>	50SM00GR-L	3
63/660V AC <sup>2</sup>	63SM00GR-L	3
80/660V AC <sup>2</sup>	80SM00GR-L	3
100/660V AC <sup>2</sup>	100SM00GR-L	3
125/660V AC <sup>2</sup>	125SM00GR-L	3

**Class aR**

160/660V AC	160SM00AR-L	3
200/660V AC	200SM00AR-L	3
250/660V AC	250SM00AR-L	3
315/660V AC	315SM00AR-L	3
350/660V AC	350SM00AR-L	3
400/660V AC	400SM00AR-L	3



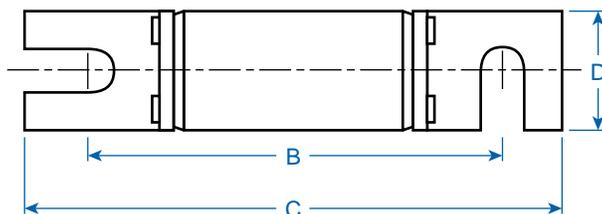
**NH0/SM-L**  
Stud Mount with  
Microswitch Holder

**Class gR**

Current/ Voltage	Cat. No.	Std. Pk.
6/660V AC	6SM0GR-L	3
10/660V AC	10SM0GR-L	3
16/660V AC	16SM0GR-L	3
20/660V AC	20SM0GR-L	3
25/660V AC	25SM0GR-L	3
32/660V AC	32SM0GR-L	3
35/660V AC	35SM0GR-L	3
40/660V AC	40SM0GR-L	3
50/660V AC	50SM0GR-L	3
63/660V AC	63SM0GR-L	3
80/660V AC	80SM0GR-L	3
100/660V AC	100SM0GR-L	3
125/660V AC	125SM0GR-L	3

**Class aR**

160/660V AC	160SM0AR-L	3
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**Approximate Dimensions  
Stud Mount mm (in.)\***

Dim.	NHC00	NH00	NH0
A	55 (2.17)	55 (2.17)	69 (2.72)
B	80 (3.15)	80 (3.15)	97 (3.82)
C	100 (3.94)	100 (3.94)	120 (4.72)
D	20 (0.79)	28 (1.10)	28 (1.10)
E	39 (1.54)	50 (1.97)	50 (1.97)

\*Dimensions to DIN 43653

# Mouser Electronics

Authorized Distributor

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## Altech:

[100NH00AM-6](#) [100NH00GL](#) [100NH00GR-6](#) [10NH00GL](#) [125NH00GL](#) [125NH00GR-6](#) [160NH00AR-6](#) [160NH00GL](#)  
[16NH00AM-6](#) [16NH00GL](#) [16NH00GR-6](#) [20NH00GL](#) [20NH00GR-6](#) [2NH00GL](#) [32NH00AM-6](#) [32NH00GL](#)  
[32NH00GR-6](#) [35NH00AM-6](#) [35NH00GL](#) [35NH00GR-6](#) [40NH00AM-6](#) [40NH00GL](#) [40NH00GR-6](#) [4NH00AM-6](#)  
[4NH00GL](#) [50NH00AM-6](#) [50NH00GL](#) [50NH00GR-6](#) [63NH00AM-6](#) [63NH00GL](#) [63NH00GR-6](#) [6NH00GL](#) [80NH00AM-](#)  
[6](#) [80NH00GL](#) [80NH00GR-6](#) [20NH00AM-6](#) [10NH00AM-6](#) [160NH00AM-6\\*](#) [6NH00AM-6](#) [2NH00AM-6](#) [125NH00AM-6](#)  
[200NH1GL](#)