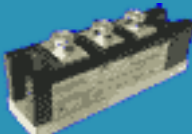
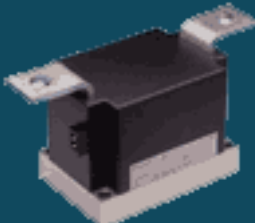


the figures in the part-no. represent the current rating [A]					
part-no.	V _{RRM, DRM}	PowerBLOCK	part-no.	V _{RRM, DRM}	PowerBLOCK
TT 61 N TD/DT 61 N	1200...1600V	 20 mm	TZ 150 N	1800...2600V	 50 mm
TT 92 N TD/DT 92 N	1000...1600V		TZ 240 N	2800...3600V	
TT 104 N TD/DT 104 N	1000...1400V		TZ 310 N	2000...2600V	
TT 70 N TD 70 N	1600...2400V	TZ 400 N	2000...2600V		
TT 85 N TD/DT 85 N	2000V	 25 mm	TZ 425 N	1000...1800V	
TT 106 N TD/DT 106 N	1000...1800V		TZ 430 N	1800...2400V	
TT 121 N TD/DT 121 N	1200...2000V		TZ 500 N	1000...1800V	
TT 131 N TD/DT 131 N	1200...1600V	 30 mm	TZ 600 N	1000...1400V	 60 mm
TT 122 N TD 122 N	1600...2400V		TT 240 N TD 240 N	2800...3600V	
TT 140 N.	1600...2200V	TT 310 N TD/DT 310 N	2000...2600V		
TT 142 N TD/DT 142 N	1200...1600V	TT 380 N.	1000...1800V		
TT 162 N TD/DT 162 N	1200...1600V	TT 400 N.	2000...2600V		
TT 180 N	1200...1600V	TT 425 N TD/DT 425 N	1000...1800V		
TT 150 N TD/DT 150 N	1800...2600V	TT 430 N.	1800...2400V		
TT 170 N TD/DT 170 N	1000...1800V	TT 500 N TD/DT 500 N	1000...1800V		
TT 210 N TD/DT 210 N	1000...1800V	TT 570 N	1200...1600V		
TT 215 N TD 215 N	1800...2400V	TZ 530 N	3000...3600V	 70 mm	
TT 250 N TD/DT 250 N	1000...1800V	TZ 630 N	2200...2800V		
TT 251 N TD/DT 251 N	1000...1800V	TZ 740 N	1800...2200V		
TT 265 N	200...600V	TZ 800 N	1200...1800V		
TT 285 N TD/DT 285 N	1200...1600V	Common anode or cathode on request			
TT 330 N	1200...1600V				
click on part-no. to select datasheet - click on other topologies to change menu					

[N-Thyristor-Modules](#)
[N-Diode-Modules](#)
[Fast Thyristor Modules](#)
[Fast Diode Modules](#)

the figures in the part-no. represent the current rating [A]

Part No.

Packages

DD 85 N

DD 89 N

DD / ND 98 N

DD / ND 104 N

20 mm Powerblock



DD 106 N

25 mm Powerblock



DD 151 N

30 mm Powerblock



DD / ND 171 N

34 mm Powerblock



Part No.

Packages

DD 175 N

DD 231 N

DD / ND 260 N

DD 261 N

DD 285 N

DD 350 N

DZ 540 N

DZ 600 N

50 mm Powerblock



DD 435 N

DD 540 N

DD / ND 600 N

60 mm Powerblock



DZ 950 N

DZ 1070 N

70 mm Powerblock



click on part-no. to select datasheet - click on other topologies to change menu

[Type Designation](#)
[Technical Explanation](#)

[N-Thyristor-Modules](#)
[N-Diode-Modules](#)
[Fast Thyristor Modules](#)
[Fast Diode Modules](#)

the figures in the part-no. represent the current rating [A]

Fast Thyristor Modules:

Fast Diode Modules:

typical Packages

TT 46 F

DD 46 S

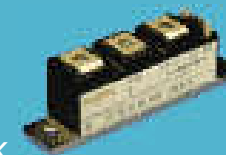
DD 81 S

DD 61 S

DD 82 S

DD 62 S

20 mm Powerblock



TT 71 F

TT 101 F

DD 121 S

TT 81 F

TT 111 F

DD 122 S

30 mm Powerblock



TT 180 F

DD 230 S

TT 200 F

DZ 180 S

DD 241 S

TZ 335 F

DZ 180 U

DD 242 S

50 mm Powerblock



click on part-no. to select datasheet - click on other topologies to change menu

[Type Designation](#)
[Technical Explanation](#)

Thyristors		
T	930 S 18 T M C	
A		symmetrically blocking thyristor
		asymmetrically blocking thyristor
930		limiting average forward current (A) at $t_c = 85^\circ \text{C}$
0		Ceramic disc W
1		Ceramic disc P
4		Epoxy disc 19 mm high
6		Epoxy disc 35 mm high
7		Epoxy disc 8 mm high
8		Epoxy disc 14 mm high
9		Epoxy disc 26 mm high
2.Letter		
	S	fast thyristor, gate-cathode interdigitated
	F	fast thyristor, central gate
	N	phase control thyristor
	18	limiting repetitive peak forward and reverse off-state voltage in 100 V, 18 = 1800 V (A: repetitive peak forward off-state voltage)
3.Letter		mechanical construction
		anode: cathode:
	B	metric thread cable
	C	metric thread solder pin
	E	flat base cable
	F	TO 220 case
	T	disc
4.Letter		maximum turn-off time
	A	8 μs
	B	10 μs
	C	12 μs
	D	15 μs
	S	18 μs
	E	20 μs
	F	25 μs
	G	30 μs
	K	40 μs
	M	50 μs
	P	55 μs
	N	60 μs
	T	80 μs
	U	120 μs
	O	no guaranteed max. value
	1	see data sheet
	2	see data sheet
5.Letter		critical rate of rise forward voltage, thyristors for line commutated converters:
	B	50 V/ μs
	C	500 V/ μs
	F	1000 V/ μs
	G	1500 V/ μs
	H	2000 V/ μs
		thyristors for self-commutated converters:
		critical rate of rise of forward voltage
		according to DIN IEC 747-6:
		immediately after turn-off:
	B	50 V/ μs
	C	500 V/ μs
	F	1000 V/ μs
	L	500 V/ μs
	M	1000 V/ μs
	N	1000 V/ μs

D	1809 N	32	diode
D			limiting average
	1809		current (A)
			as a rule at $t_c = 100^\circ \text{C}$
			rectifier diode:
	N		anode on case
			or press-pack
	K		cathode on case
			fast rectifier diode:
	S		anode on case
			or press-pack
	U		cathode on case
	32		limiting repetitive peak
			reverse voltage in 100 V
			mechanical construction:
	A		metric thread
	B		wire
			cable
	C		stud
			solder pin
	E		flat-base
			cable
	T		press-pack
	A		Avalanche Diode
			anode / case
	B		Avalanche Diode
			cathode / case

TD 121	N	18	K	O	F	-A	with 1 symmetric thyristor and 1 diode
TD,DT							with 1 asymmetric thyristor and 1 diode (for circuit see outline)
AD							limiting average on-state current (A), $t_c = 85^\circ \text{C}$
	121						phase control thyristor and rectifier diode
		N					fast thyristor
		F					and fast diode
		S					fast thyristor with interdigitated gate and fast diode
			18				repetitive peak-off-state voltage in 100 V
				K			mech. constr.: pressure contact
					O		turn-off time (see thyristors)
					F		critical rate of rise of off-state voltage
						-A	special design with common anode
						-K	special design with common cathode

[illegible]

DD 151 N 18 K -A	
DD	dual version
D, ND, DZ	with 1 diode
	(for circuit see outline)
151	limiting average forward
	current (A), $t_c = 100^\circ \text{C}$
N	rectifier diode
S	fast rectifier diode
18	repetitive peak off-state
	voltage in 100 V
L	mech. constr.: module-DCB
K	mech. constr.: module
-A	special design with
	common anode
-K	special design with
	common cathode

TD	B6	HK	105	N	16	KOF	
DD							diode module
TT							thyristor module
TD							thyristor/diode
	B6						three phase bridge
	W3						three phase
							AC-switch
		C					fully controlled
		H					half controlled
		U					uncontrolled
		K					common cathode
			105				of thyristors
				N			output current (A)
							(W3C: RMS-
							current)
				16			phase control
							thyristor/diode
							repetitive peak
							off-state voltage
							in 100V
					L		mech. constr.:
							module
					R		outline: ECONOPACK
					RR		outline: ECONOPACK
							with integr. brake
							chopper IGBT
					O		no guaranteed
							turn-off time
					F		critical rate of rise of
							off-state voltage

FF 800	R	17	K	F	D	B2	Dual Switch
FF				F			Single Switch
FZ				L			3-phase full Bridge
FS				S			Power integrated Modul
FP				E			One phase bridge
F4-							Chopper config.
FD							Dual Diode
DD							(for circuit see outline)
	800						Max. DC-collector current (A)
		R					Reverse conducting
		S					Fast Short Tail IGBT Chip
			17				Collector-emitter-voltage in 100 V
				K			Mechanical construction:
							Module
				F			Fast switching IGBT Chip
				L			Low Loss IGBT Chip
				S			Fast Short Tail IGBT Chip
				E			Low Sat & fast IGBT ³ Chip
					1..n		Internal reference number
						C	With EmCon diode
						D	Higher rated diode
					B1..n		Construction variation
					S1..n		Electrical selection

BSM 100 GB 120 D N2 K

B Silicon
S Type: S=Switch, Y = Diode
M Module
100 current rating $I_C = 100$ A
G technology: G = IGBT-technology
B Configuration:
A = single switch / diode
B = Halfbridge
D = 3-phase full bridge
T = Tripack (3 single switches)
P = Power Integrated Module
AL=Chopper, diode conn. to collector
AR=Chopper, diode conn. to emitter
120 max. coll.-emitter-voltage in 10V
D with fast internal diode
N low inductance module design
L Low Loss IGBT chip
2 2nd generation silicon
K design variation
G design variation
S collector sense
E xxxx special type with code-no.