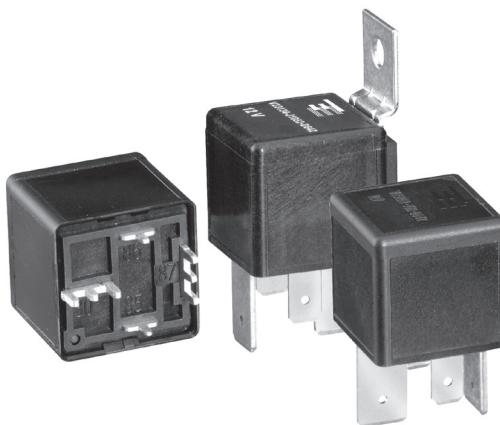


Power Relay F7

- Pin assignment similar to ISO 7588 part 1
- Customized versions on request
 - 24VDC versions with contact gap >0.8mm
 - Integrated components (e.g. resistor, diode)
 - Customized marking/color
 - Special covers (e.g. notches, release features, brackets)

Typical applications

Cross carline up to 70A for example: ABS control, cooling fan, energy management, engine control, glow plug, heated front screen, ignition, lamps: front, rear, fog light, main switch/supply relay.

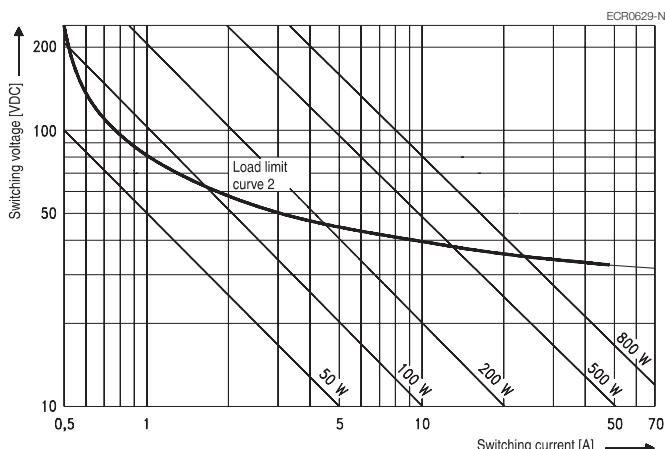


F134J_a_bw

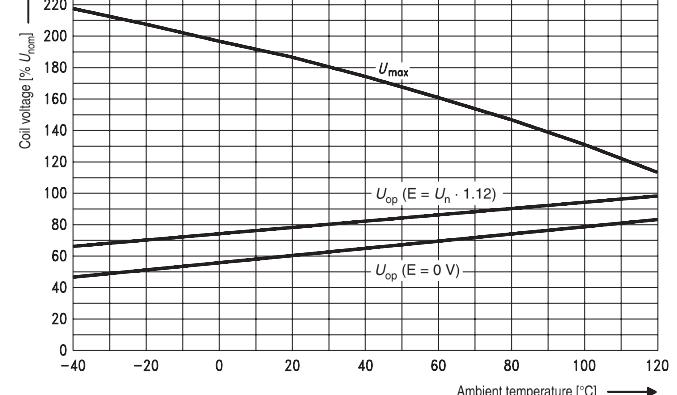
Contact Data

Contact arrangement	1 form A, 1 NO	1 form A, 1 NO	1 form A, 1 NO
Contact gap	–	–	>0.8mm
Rated voltage	12VDC	24VDC	24VDC ¹⁾
Limiting continuous current			
23°C	70A	70A	70A
85°C	50A	50A	50A
125°C	30A	30A	30A
Limiting making current ²⁾	240A	240A	240A
Limiting breaking current	70A	25A	40A
Limiting short-time current			
overload current, ISO 8820-3 ³⁾	1.35 x 50A, 1800s 2.00 x 50A, 5s 3.50 x 50A, 0.5s 6.00 x 50A, 0.2s		
Jump start test, ISO 16750-1		24VDC for 5min, conducting nominal current at 23°C	
Contact material	Silver based		
Min. recommended contact load ⁴⁾	1A at 5VDC		
Initial voltage drop,			
form A (NO) contact at 10A, typ./max.	10/300mV		
Frequency of operation at nominal load	6 ops./min (0.1Hz)		
Operate/release time typ.	7/2ms ⁵⁾		
Electrical endurance ⁶⁾			
resistive load at 14VDC	>1x10 ⁵ ops. 70A >2x10 ⁵ ops. 50A	–	–
resistive load at 28VDC	–	>1x10 ⁵ ops. 25A	>1x10 ⁵ ops. 40A

Max. DC load breaking capacity



Coil operating range

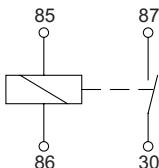
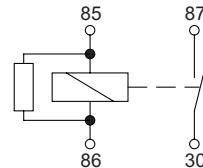
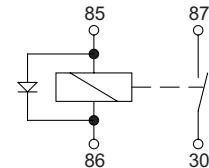


Power Relay F7 (Continued)
Insulation Data

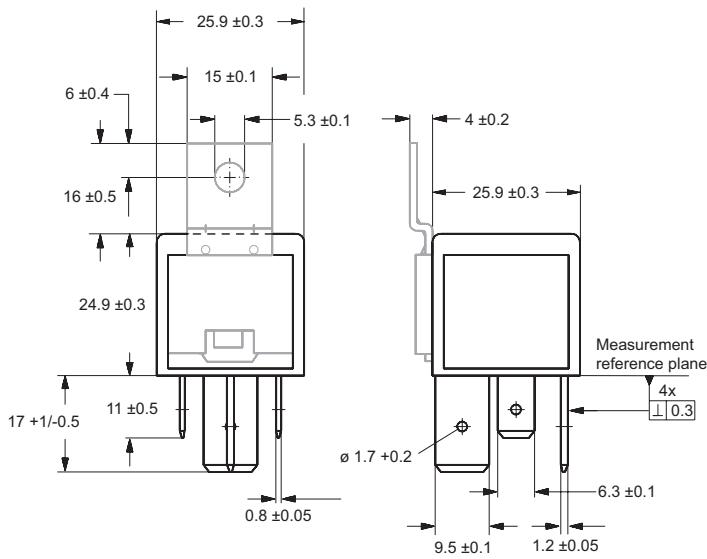
Initial dielectric strength	
between open contacts	500V _{rms}
between contact and coil	500V _{rms}
between adjacent contacts	500V _{rms}
Load dump test	
ISO 7637-1 (12VDC), test pulse 5	V _s =+86.5VDC
ISO 7637-2 (24VDC), test pulse 5	V _s =+200VDC

Other Data

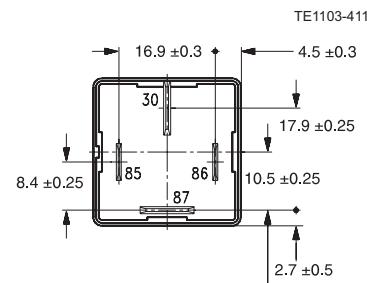
EU RoHS/ELV compliance	compliant
Protection to heat and fire according UL-94	HB or better ⁸⁾
Ambient temperature	-40 to 125°C
Climatic cycling with condensation	
EN ISO 6988	6 cycles, storage 8/16h
Temperature cycling, IEC 60068-2-14, Nb	10 cycles, -40/+85°C (5°C/min)
Damp heat cyclic, IEC 60068-2-30, Db, Variant 1	6 cycles, upper air temp. 55°C
Damp heat constant, IEC 60068-2-3, Ca	56 days
Category of environmental protection, IEC 61810	RTI – dustproof
Degree of protection, IEC 60529	IP54 (dustproof)
Corrosive gas	
IEC 60068-2-42	10±2cm ³ /m ³ SO ₂ , 10 days
IEC 60068-2-43	1±0.3cm ³ /m ³ H ₂ S, 10 days
Vibration resistance (functional)	
IEC 60068-2-6 (sine sweep)	10 to 500Hz, min. 5g ⁸⁾

Terminal Assignment
NO
1 form A, NO

NOR
1 form A, NO with resistor

NOD
1 form A, NO with diode

Dimensions

Power Relay F7 with quick connect terminals similar to ISO 8092-1



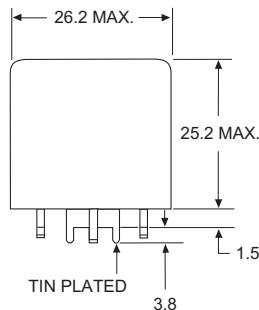
View of the terminals (bottom view)



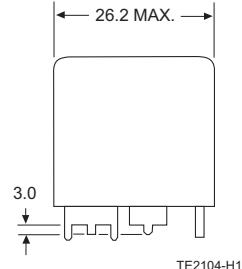
Power Relay F7 (Continued)

Dimensions (continued)

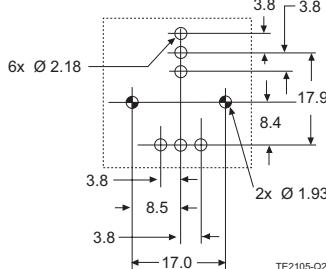
Power Relay F7 with PCB terminals



View of the terminals (bottom view)



Mounting hole layout (bottom view)



Product code structure

Typical product code **V23134** **-J** **0** **052** **-D642**

Type
V23134 Power Relay F

Contact arrangement

J 1 form A, 1 NO

Cover

0	Standard	1	Bracket at terminal 30 ISO
2	Bracket near terminal 86 ISO		

Coil

052	12VDC	053	24VDC
165	24VDC	065	24VDC

Terminal/arrangement

D642 Plug-in/NO

Xnnn Customized (nnn: version number)

Production in Europe (only)

Product code	Arrangement	Cover	Coil suppr.	Circuit ¹⁾	Coil	Contact mat.	Terminals	Part number
V23134-J0052-D642	1 form A, 1 NO	Standard		NO	12VDC	Silver based	Plug-in, QC	7-1393303-3
V23134-J0052-X429			Resistor 680Ω	NOR				1-1414147-0
V23134-J0052-X439			Diode (cathode 86)	NOD				1-1414286-0
V23134-J0052-X455			Resistor 470Ω	NOR			PCB	1-1414610-0
V23134-J0052-X511				NO				3-1415001-2
V23134-J0052-X461 ³⁾			Resistor 560Ω	NOR			Plug-in, QC	1-1414469-0
V23134-J0053-D642				NO	24VDC			9-1393303-7
V23134-J0065-X497 ⁴⁾							PCB	3-1414937-3
V23134-J0165-X537 ²⁾			Resistor 1200Ω	NOR			Plug-in, QC	3-1904117-4
V23134-J1052-D642		Bracket		NO	12VDC			0-1393304-9
V23134-J1052-X281			Resistor 560Ω	NOR				1-1393304-0
V23134-J1053-D642				NO	24VDC			1-1393304-1
V23134-J2165-X538 ²⁾			Resistor 1200Ω	NOR				3-1904117-5

1) See terminal assignment diagrams.

2) Special feature: contact gap >0.8mm.

Other types on request.

This list represents the most common types and does not show all variants covered by this datasheet.

3) Special feature: 14.5mm load terminals.

4) Packed in tray with 300 pcs. per unit.

Production in Asia (only)

Product code	Arrangement	Cover	Coil suppr.	Circuit ¹⁾	Coil	Contact mat.	Terminals	Part number
V23134-J0052-D642	1 form A, 1 NO	Standard		NO	12VDC	Silver based	Plug-in, QC	7-1904094-7
V23134-J0052-X429			Resistor 680Ω	NOR				7-1904094-8
V23134-J0052-X439			Diode (cathode 86)	NOD				7-1904094-9
V23134-J0052-X461 ³⁾			Resistor 560Ω	NOR				8-1904094-0
V23134-J0053-D642				NO	24VDC			8-1904094-3

1) See terminal assignment diagrams.

2) Special feature: contact gap >0.8mm.

Other types on request.

This list represents the most common types and does not show all variants covered by this datasheet.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[1-1393302-6](#)