

Ex-d built-in components - MCB Modules



MCB 0.5A to 63A

Certifications and Compliances

Marking accd. to ATEX/IECEx	Ex db eb IIC Gb
Application temperature	-40°C up to +64°C / -20°C up to +64°C

Electrical Ratings

Rated voltage	Main contact	max. 440 V AC
	Auxiliary contact	max. 250 V AC
Rated current	Main contact	0.5A to 63A
	Auxiliary contact	max. 5 A
Rated switching capacity 2/3 phase		max. 15kA
Back-up fuse		depend on rated current up to 125A
Connection terminals	Main contact	25 mm ²
	Auxiliary contact	2.5 mm ²

Additional Specifications

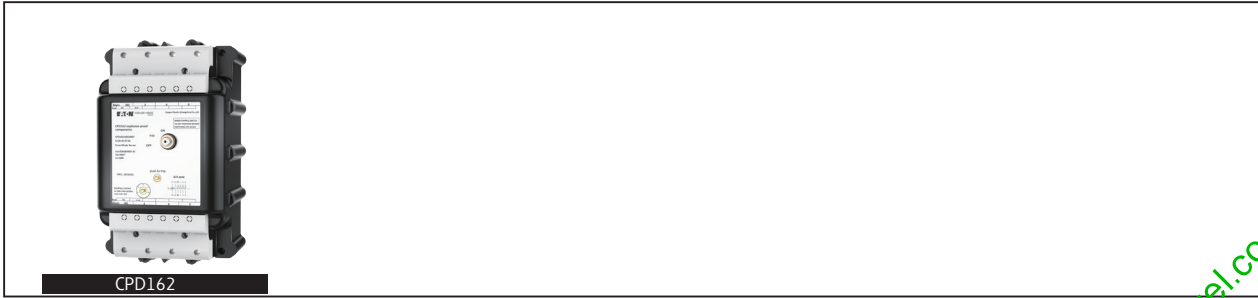
Weight		0.74 kg size 1
		1.13 kg size 2
		1.49 kg size 3
Enclosure material		Reinforced flame-retardant nylon
Enclosure colour		black
Options		Aux. contact; signal contact; shunt trip; undervoltage release
Padlocking capability		Padlockable at off position

MCB Ordering Logic

CPD161	-2	-1	1	2	-C	630	10	-1	2	1	1	N			
Product Group	Enclosure size	Internal components code	Internal MCB	MCB size	Tripping characteristic	Rated current	Rated switching capacity	Aux. contact	Signal contact	Shutting release	Undervoltage release	Tamb			
CPD161	2 Size 1	1 MCB	1 Eaton/PL10~1P(230/400V), 2~4P(400V) 50/60Hz	1 1Pole	B B capacity	005 0.5A	15 15kA ¹⁾	0 NA	0 NA	0 NA	0 NA	N			
	3 Size 2			2 2Pole	C C capacity	010 1A	10 10kA	1 1NO	1 1C/O	1 12-110V	1 115VAC	-20°C up to +64°C			
	4 Size 3			3 3Pole	D D capacity	020 2A	06 6kA	2 1NC	2 110-415V	2 230VAC	Blank	+64°C			
	Enclosure Size 1 2P			4 4Pole	030 3A	3 3C/O	3 400VAC	3 400VAC	Blank						
				1P	040 4A	4 2NO	4 2NO	4 2NO	-40°C up to +64°C						
				1P+ Aux. contact (1NO+1NC or 1CO or 2CO)	060 6A	5 1NO+1C/O	5 1NO+1C/O	5 1NO+1C/O							
				1P+ Signal contact 1CO and/or Aux. contact 1CO)	080 8A	6 1NO+1NC	6 1NO+1NC	6 1NO+1NC							
				1P+ shutting release contact	100 10A										
				1P+ undervoltage release contact	130 13A										
	Enclosure Size 2 3P			2P	160 16A										
				2P+ Aux. contact (1NO+1NC or 1CO or 2CO)	200 20A										
				2P+ Signal contact 1CO and/or Aux. contact 1CO)	250 25A										
				2P+ shutting release contact	320 32A										
				2P+ undervoltage release contact	400 40A										
					500 50A										
Enclosure Size 3 4P		630 63A													
	3P/4P+ Aux. contact (1NO+1NC or 1CO or 2CO)														
	3P/4P+ Signal contact 1CO and/or Aux. contact 1CO)														
	3P/4P+ shutting release contact														
	3P/4P+ undervoltage release contact														

¹⁾ FAZ only
Contact Eaton for other configuration

Ex-d built-in components - MCCB Modules



MCCB 20A to 250A

Certifications and Compliances

Marking accd. to ATEX/IECEx	Ex db eb IIC Gb
Functional temperature	-20°C up to +70°C
Application temperature ¹⁾	-20°C up to +55°C
Limits of service temperature	-20°C up to +110°C
Component degree of protection accd. EN 60529	IP20
Storage temperature	-20°C up to +55°C in original packing

Electrical Ratings

Safe isolation to EN 61140	between aux contacts and main contacts	500 V AC
	between aux contacts	300 V AC
Rated impulse withstand voltage	main contacts	8000 V
	auxiliary contacts	6000 V
Rated operating voltage U_e		440 V
Rated switching capacity I_{cu}	400/415/440V (50/60Hz) kA/cos ϕ	25 kA
	500VDC	
Rated current I_n	main contact	20A,25A,32A,40A,63A,80A,100A,125A,160A,200A or 250A
	aux. contact	max. 5 A
Adjustable setting range I_r		0.8 to 1.0 x rated current I_n
Short current protection		$I_i = 10 \times I_n$
Utilization category to IEC/EN 60947-2		A
Making/breaking capacity at rated current up to 400 V		AC1 & AC3
Connecting terminals main contact		1 x 4.0 mm ² up to 1 x 185 mm ²
Rated voltage aux. contact		max. 500 V AC
Rated current aux contact	AC15 Ie (up to 230 V) / DC13 Ie (up to 24 V)	4 A / 3 A
	AC15 Ie (up to 400 V) / DC13 Ie (up to 60 V)	2 A / 1.2 A
	AC15 Ie (up to 500 V) / DC13 Ie (up to 110 V)	1 A / 0.8 A
	DC13 Ie (up to 220 V)	0.3 A
Connecting terminals aux./signal contact		1.0 mm ² up to 4.0 mm ² fine stranded
Total opening delay on short circuit		< 10 ms

Additional Specifications

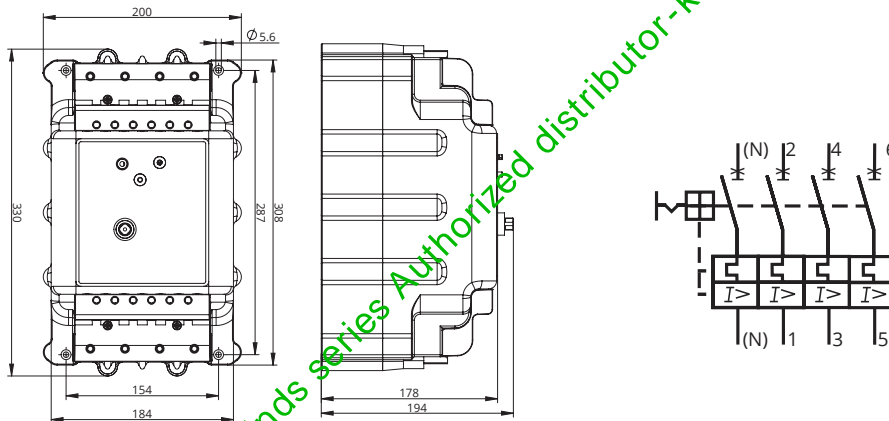
Weight	12.7 kg - 4-pole / 11.5 kg - 3-pole
Enclosure material	GRP
Built-in position	Vertical and rotated 90 deg in all directions
Release system	Thermomagnetic release

¹⁾ The limits of the operating temperature range and the max. permissible temperature rise of the components (functional temperature) have to be taken into account.

MCCB Ordering Logic

CPD162	3	5	020	00	01
Product type	MCCB pole	Breaking capacity	Rated current	Accessories 1	Accessories 2
CPD162	3 3pole 4 4pole	1 440V/25kA,DC500V 10kA	020 20A 025 25A 032 32A 040 40A 050 50A 063 63A 080 80A 100 100A 125 125A 160 160A 200 200A 250 250A	00 MCCB only 01 MCCB + 1NO 02 MCCB + 1NC 03 MCCB + trip indicator 1NO 04 MCCB + 1NO+1NC+trip indicator 1NC 05 MCCB + 2NO 06 MCCB + 2NC 07 MCCB + 2NO + trip indicator 1NO 08 MCCB + 2NC + trip indicator 1NO 09 MCCB + 1NC + trip indicator 1NO	00 MCCB only 01 shunt trip 24VAC/DC + early make 1NO 02 shunt trip 110V-130VAC/DC + early make 1NO 03 shunt trip 208V-250VAC/DC + early make 1NO 04 shunt trip 380V-440VAC/DC + early make 1NO 05 uv release 24V 50/60Hz + early make 1NO 06 uv release 110V-130V 50/60Hz + early make 1NO 07 uv release 208V-240V 50/60Hz + early make 1NO 08 uv release 380V-440V 50/60Hz + early make 1NO 09 uv release 480V-525V 50/60Hz + early make 1NO 10 shunt trip 24VAC/DC 11 shunt trip 110V-130VAC/DC 12 shunt trip 208V-250VAC/DC 13 shunt trip 380V-440VAC/DC 14 uv release 24V 50/60Hz 15 uv release 110V-130V 50/60Hz 16 uv release 208V-240V 50/60Hz 17 uv release 380V-440V 50/60Hz 18 uv release 480V-525V 50/60Hz 19 early make aux switch 2NO 20 uv release 24VDC

Dimension drawing (mm) / Connection diagram



Ex-d built-in components - RCD modules



RCD 30mA to 300mA (16A/25A/40A/63A)

Certifications and Compliances		
Marking accd. to ATEX/IECEX	Ex db eb IIC Gb	
Application temperature	-25°C up to +55°C / -20°C up to +55°C	
Electrical Ratings		
Rated voltage	Main contact	max. 415 V AC
	Auxiliary contact	max. 250 V AC
Rated current	Main contact	16A to 63A
	Auxiliary contact	max. 5 A
Rated residual operating current	30mA, 100mA or 300mA	
Back-up fuse	depend on rated current up to 400 A	
Connection terminals	Main contact	25mm ²
	Auxiliary contact	2.5 mm ²
Additional Specifications		
Weight	0.74 kg Size 1	
	1.13 kg Size 2	
	1.49 kg Size 3	
Enclosure material	Reinforced flame-retardant nylon	
Enclosure colour	black	
Options	Aux. contact; signal contact	
Padlocking capability	Padlockable at off position	

RCD Ordering Logic

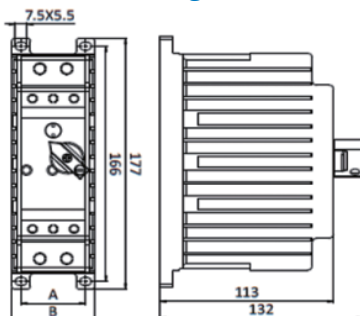
Product Group	Enclosure size	Internal components code ¹⁾	Internal RCD	Internal industrial RCD size	Rated current	Rated residual operating current	Aux. contact	Signal contact	Tamb
CPD161	2 Size 1	2 RCD	1 Eaton / PFIM / 2P or 4P / (230V/400V) / 50Hz / 55°C ²⁾	2 2Pole	160 16A ¹⁾	030 30mA	0 NA	0 NA	N -20°C up to +55°C Blank -25°C up to +55°C TN -20°C up to +40°C T -25°C up to +40°C
	3 Size 2								
	4 Size 3	2 Eaton / FRCM-A / 2P or 4P / (240V/415V) / 60Hz / 40°C	4 4Pole	250 25A 400 40A 630 63A	100 100mA ²⁾ 300 300mA ²⁾	1 1C/O	1 1C/O		
	Enclosure Size 1							2P	
Enclosure Size 2	2P+ Aux. contact(1CO) 2P+ Signal contact (1CO)								
Enclosure Size 3	4P 4P+ Aux. contact(1CO) 4P+ Signal contact (1CO)								

¹⁾ FRCM-A only

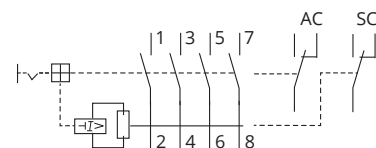
²⁾ Not available for FRCM-A 63A/2P and 63A/4P

³⁾ This is max. permissible ambient temperature
Contact Eaton for other configuration

Dimension drawing (mm) / Connection diagram



Product type	A	B
CPD161-2	42	54
CPD161-3	60	72
CPD161-4	96	108



Ex-d built-in components - RCBO modules



RCBO 6A to 63A (30A/300mA)

Certifications and Compliances

Marking accd. to ATEX/IECEx	Ex db eb IIC Gb
Application temperature	-25°C up to +55°C / -20°C up to +55°C

Electrical Ratings

Rated voltage	Main contact	max. 400 V AC
	Auxiliary contact	max. 250 V AC
Rated current	Main contact	6A to 63A
	Auxiliary contact	max. 5 A
Rated switching capacity 2/3 phase		10 kA
Back-up fuse		depend on rated current up to 100 A
Connection terminals	Main contact	25mm ²
	Auxiliary contact	2.5 mm ²

Additional Specifications

Weight		0.74 kg size 1
		1.13 kg size 2
		1.49 kg size 3
Enclosure material		Reinforced flame retardant nylon
Enclosure colour		Black
Options		Aux. contact; signal contact
Padlocking capability		Padlockable at off position

RCBO Ordering Logic

Product Group	Enclosure size	Internal components code	Internal RCBO	RCBO size	Tripping characteristic	Rated current	Rated switching capacity	Rated residual operating current	Aux. contact	Signal contact	Tamb	
CPD161	2 Size 1	3 RCBO	1 Eaton / PLD10 / 1P+N / 230V / 50Hz / 10kA / 55°C ¹⁾ / Electronic 2 Eaton / PL10+PDB / 2P/400V / 50Hz / 10kA / 55°C / Electronic ²⁾ 3 Eaton / PFL10 / 1P+N / 230V / 50Hz / 10kA / 55°C / Electromagnetic 4 Eaton / PL10+PBSM / 2P / 230V / 50Hz / 10kA / 55°C / Electromagnetic ²⁾ 5 Eaton / FRBmM-B / 2P / 240V / 50Hz or 60Hz / 10kA / 40°C 6 Eaton / FRBm6-B / 2P / 240V / 50Hz / 6kA, only 32A or 40A / 40°C 7 Eaton / FRBmM-C / 2P / 240V / 50Hz / 60Hz / 10kA / 40°C 8 Eaton / FRBm6-C / 2P / 240V / 50Hz / 6kA, only 32A or 40A / 40°C	2 1Pole+N	B B capacity	060 6A	10 10kA	030 30mA	0 NA	0 NA	N -20°C up to +55°C	
	3 Size 2			4 2Pole	C C capacity	080 8A	06 6kA	300 300mA	1 1C/O	1 1C/O	Blank -25°C up to +55°C	
	4 Size 3			D D capacity	100 10A		130 13A		100 100mA ³⁾	2 2C/O	2 2C/O	TN -20°C up to +40°C T -25°C up to +40°C
	Enclosure Size 1			1P+N		160 16A						
	Enclosure Size 2			2P		200 20A						
				1P+N+Aux. contact(1CO)		250 25A						
				1P+N+ Sig. contact(1CO or 2CO)		320 32A						
				2P+ Aux. contact(1CO)		400 40A						
				2P+ Sig. contact(1CO or 2CO)		500 50A						
	Enclosure Size 3			2P+ Aux. contact(1CO) ⁴⁾		630 63A						
				2P+ Sig. contact(1CO or 2CO) ⁴⁾								

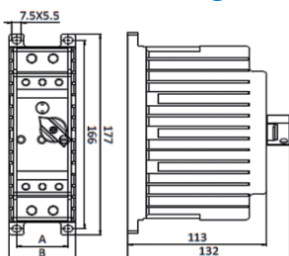
¹⁾ PL10+PDB or PL10+PBSM

²⁾ Enclosure size 3, Utilize philosophy of MCB + RCCB connection in series for 2pole RCBO

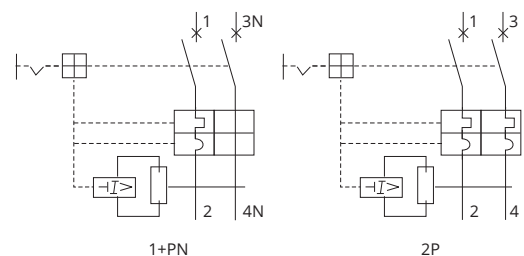
³⁾ Not available for PLD10 & PFL10

⁴⁾ This is max. permissible ambient temperature
Consult Eaton for other configuration

Dimension drawing (mm) / Connection diagram



Product type	A	B
CPD161-2	42	54
CPD161-3	60	72
CPD161-4	96	108



Ex-d built-in components - Motor Contactors



Motor Contactors

Certifications and Compliances

Marking accd. to ATEX/IECEx	Ex db eb IIC Gb
Application temperature	-20°C up to +50°C

Electrical Ratings

Rated voltage	Main contact	max. 440V AC			
	Auxiliary contact	max. 415V AC			
Rated current	Auxiliary contact	max. 5A			
	Main contact	6 A	9 A	12 A	16 A
Rated capacity AC-3 accd. to EN 60947-4-1	220/240V	1.5 kW	2.2 kW	3 kW	3 kW
	380/415V	2.2 kW	4 kW	5.5 kW	7 kW
	440V	3 kW	4 kW	5.5 kW	7.5 kW
Connection terminals	Main contact	25 mm ²			
	Auxiliary contact	2.5 mm ²			

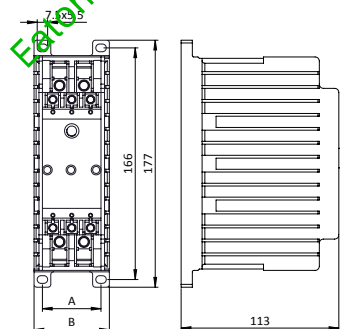
Additional Specifications

Weight	3 pole	1.13 kg size 2
Enclosure material	Reinforced flame retardant nylon	
Enclosure colour	black	
Options	Aux. contact	

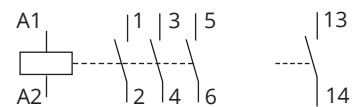
Motor contactor Ordering logic

CPD161	-3	-6	1	09	-AC230	-2	-1	N	
Product Group	Enclosure size	Internal components code	Internal contact	Rated current	Control voltage(A1-A2)		Aux. contact NO number	Aux. contact NC number	Tamb
CPD161	3 Size 2	6 Motor contactor	1 Schneider TeSys K series	06 6A 09 9A 12 12A 16 16A	AC024 AC24 V AC048 AC48 V AC110 AC110 V AC230 AC230 V AC240 AC230/240 V AC400 AC380/400 V AC440 AC440 V	DC012 DC12 V DC024 DC24 V DC048 DC48 V DC060 DC60 V DC110 DC110 V DC220 DC220 V	0 NA 1 1NO 2 2NO	0 NA 1 1NC 2 2NC	N -20°C up to +50°C Blank -25°C up to +50°C

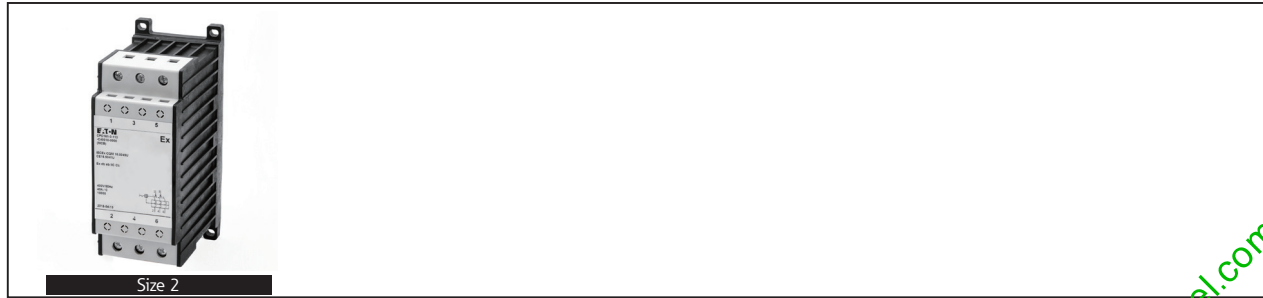
Dimension drawing (mm) / Connection diagram



Product type	A	B
CPD161-3	60	72



Ex-d built-in components - Installation Contactors



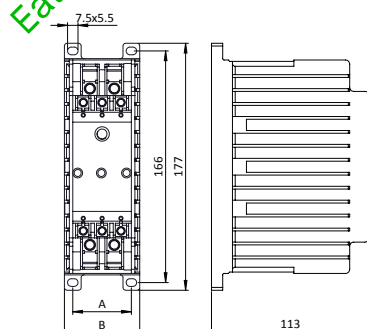
Installation Contactors

Certifications and Compliances		
Marking accd. to ATEX/IECEx	Ex db eb IIC Gb	
Application temperature	-25°C up to +64°C / -20°C up to +64°C	
Electrical Ratings		
Rated voltage	Main contact	max. 415V AC
	Auxiliary contact	max. 415V AC
Rated current	Auxiliary contact	max. 5A
	Main contact	20 A
Rated capacity AC-1 accd. to IEC/EN 60947-4-1	220-240V	7.6 kW
	380-415V	13.5 kW
Rated capacity AC-3 accd. to IEC/EN 60947-4-1	220V	2.2 kW
	230-240V	2.5 kW
	380-415V	4 kW
Connection terminals	Main contact	25mm ²
	Auxiliary contact	2.5 mm ²
Additional Specifications		
Weight	1.13 kg size 2 1.49 kg size 3	
Enclosure material	Reinforced flame retardant nylon	
Enclosure colour	black	

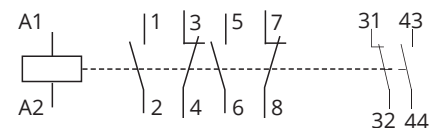
Installation Contactor Ordering Logic

CPD161	-2	-5		2	-50	230	-3	1	0	1	N
Product Group	Enclosure size	Internal components code	Internal installation contactors	Installation contactor Pole number	Rated current	Control voltage (Coil voltage)	Main NO contacts	Main NC contacts	Aux. NO contacts	Aux. NC contacts	Tamb
CPD161	3 Size 2	5 Installation contactor	1 Eaton/Z-SCH installation contactor	2 2Pole 4 4Pole	20 20A	024 24V AC 230 230V AC	0 0NO 1 1NO 2 2NO 3 3NO 4 4NO	0 0NC 1 1NC 2 2NC 3 3NC 4 4NC	0 0NO 1 1NO	0 0NC 1 1NC	N -20°C up to +64°C Blank -25°C up to +64°C
Enclosure size 2 20A rating											

Dimension drawing (mm) / Connection diagram



Product type	A	B
CPD161-3	60	72



Ex-d built-in components - Thermal Relays



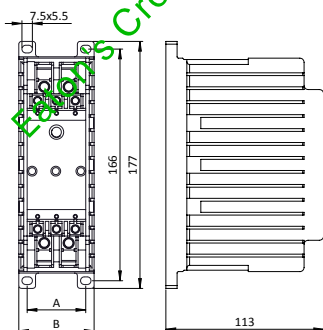
Thermal Relays

Certifications and Compliances		
Marking accd. to ATEX/IECEx	Ex db eb IIC Gb	
Application temperature	-20°C up to +40°C	
Electrical Ratings		
Rated voltage	Main contact	max. 600V AC
	Auxiliary contact	max. 600V AC
Rated current	Main contact	12.5A
	Auxiliary contact	max. 5 A
Connection terminals	Main contact	25mm ²
	Auxiliary contact	2.5mm ²
Additional Specifications		
Weight	3 pole	1.13 kg size 2
Enclosure material	Reinforced flame retardant nylon	
Enclosure colour	black	

Thermal relay Ordering Logic

CPD161	3	4	1	02	N
Product Group	Enclosure size	Internal components code	Rated voltage (production series)	Rated current (Tripping current)	Tamb
CPD161	3 Size 2	4 Thermal relay	1 Eaton/XTOD/CC1 Thermal relay	01 0.3-0.45A 02 0.45-0.67A 03 0.67-1.0A 04 1.0-1.5A 05 1.4-2.1A 06 1.8-2.7A 07 2.4-3.6A 08 3.5-5.0A 09 4.0-6.0A 10 5.5-8.5A 11 8.5-12.5A	N -20°C up to +40°C Blank -25°C up to +40°C

Dimension drawing (mm) / Connection diagram



Product type	A	B
CPD161-3	60	72

