## xStart

## Innovations for the contactors DIL.



## $\times$ Start

The complete range of contac-
tors, efficient motor-starters and controlled drives for the motor circuit. New simple to install solutions based on
clever communication.

## Contactors DIL

Motor protective
circuit-breakers PKZ
Motor starters MSC
Softstarters DS, DM
Frequency inverters
DF, DV
Rapid Link

Product information Innovations Contactors DIL

## Moeller @

## Four pole switching, simple plug-in of circuit-boards and motor filters.



New 4-pole contactors from the xStart series
The new 4-pole contactor from Moeller optimized for AC-1 switched loads. They are the specialists for applications where the mains is switched off or over, heating systems are switched and 4-pole loads are switched.

Four compact contactors cover the performance range up to 200 A . The identical size for AC and DC operated contactors as well as a common range of accessories for 3 and 4-pole contactors guarantee efficient and simple planning and engineering.

Easily accessible coil connections on the front, and a convenient box terminal with two separate cable connection areas provide significant advantages for fast and safe wiring. The mechanical interlock does not require additional installation width space.

The low holding power with DC operated contactors does not just reduce the heating in the control panel, but also increases the packing densities which provide the panel builders with tangible savings in energy costs.


Simply select and order: xStart 4-pole contactor catalogue

Enter the quicklink number at www.moeller.net ein:


| 3-pole contacters |  |  |  | 4-pole contacters |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { AC-3 } \\ & 380 \mathrm{~V} / 400 \mathrm{~V} \end{aligned}$ |  | $\begin{aligned} & \text { AC } 230 \mathrm{~V} 50 \mathrm{HZ} 240 \mathrm{~V} 60 \mathrm{~Hz}, \\ & 110 \mathrm{~V} 50 \mathrm{HZ} 120 \mathrm{~V} 60 \mathrm{~Hz}, \\ & 24 \mathrm{~V} 50 / 60 \mathrm{~Hz}, \\ & \text { DC } 24 \mathrm{~V}^{1} \end{aligned}$ |  | AC-1 Conventional thermal current open |  | $\begin{aligned} & \text { AC } 230 \mathrm{~V} 50 \mathrm{HZ} 240 \mathrm{~V} 60 \mathrm{~Hz}, \mathrm{o} . \mathrm{RAC} 240^{3}, \\ & 110 \mathrm{~V} 50 \mathrm{HZ} 120 \mathrm{~V} 60 \mathrm{~Hz}, \\ & 24 \mathrm{~V} 50 / 60 \mathrm{~Hz}, \\ & \text { DC } 24 \mathrm{VDC} \text { or RDC } 24^{4} \end{aligned}$ |
| e A | kW | Normally open <br> Normally closed | Part No. <br> Complete with above voltage | $\begin{aligned} & I_{t h}=I_{e} \\ & \mathrm{~A} \end{aligned}$ | N. open <br> N. closed | Part No. <br> Complete with above voltage |
| $\begin{aligned} & 7 \\ & 7 \\ & 9 \\ & 9 \\ & 12 \\ & 12 \\ & 15.5 \\ & 15.5 \end{aligned}$ | $\begin{aligned} & 3 \\ & 3 \\ & 4 \\ & 4 \\ & 5.5 \\ & 5.5 \\ & 7.5 \\ & 7.5 \end{aligned}$ | 1N/O <br> 1N/C <br> 1N/O <br> 1N/C <br> 1N/O <br> 1N/C <br> 1N/O <br> 1N/C | DILM7-10 (...) <br> DILM7-01(...) <br> DILM9-10 (...) <br> DILM9-01 (...) <br> DILM12-10 (...) <br> DILM12-01 (...) <br> DILM15-10 (...) <br> DILM15-01 (...) | 20 | - | DILMP20 (...) |
| $\begin{aligned} & 18 \\ & 18 \\ & 25 \\ & 25 \\ & 32 \\ & 32 \end{aligned}$ | $\begin{aligned} & 7.5 \\ & 7.5 \\ & 11 \\ & 11 \\ & 15 \\ & 15 \end{aligned}$ | 1N/O <br> 1N/C <br> 1N/O <br> 1N/C <br> 1N/O <br> 1N/C | DILM17-10 (...) <br> DILM17-01 (...) <br> DILM25-10 (...) <br> DILM25-01 (...) <br> DILM32-10 (...) <br> DILM32-01 (...) | $\begin{aligned} & 32 \\ & 45 \end{aligned}$ | $\begin{aligned} & 1 \mathrm{~N} / \mathrm{O} \\ & 1 \mathrm{~N} / \mathrm{O} \end{aligned}$ | DILMP32-10 (...) DILMP45-10 (...) |
| $\begin{aligned} & 40 \\ & 50 \\ & 65 \\ & 72 \end{aligned}$ | $\begin{aligned} & 18.5 \\ & 22 \\ & 30 \\ & 37 \end{aligned}$ |  | DILM40 (...) <br> DILM50 (...) <br> DILM65 (...) <br> DILM72 (...) | $\begin{aligned} & 63 \\ & 80 \end{aligned}$ | - | DILMP63 (...) <br> DILMP80 (...) |
| $\begin{aligned} & 80 \\ & 95 \\ & 115 \\ & 150 \\ & 170 \end{aligned}$ | $\begin{aligned} & 37 \\ & 45 \\ & 55 \\ & 75 \\ & 90 \end{aligned}$ |  | $\begin{aligned} & \text { DILM80 (...) } \\ & \text { DILM95 (...) } \\ & \text { DILM115 (...) } \\ & \text { DILM150 (...) } \\ & \text { DILM170 }(\ldots)^{2} \end{aligned}$ | $\begin{aligned} & 125 \\ & 160 \\ & 200 \end{aligned}$ |  | $\begin{aligned} & \text { DILMP125 (...) } \\ & \text { DILMP160 (..) } \\ & \text { DILMP200 (...) } \end{aligned}$ |



| Auxiliary switch |  |  | Overload relay |  | Electronic timer module |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \mathrm{AC} 15, \\ & 380 \mathrm{~V} \\ & 400 \mathrm{~V} \\ & 415 \mathrm{~V} \end{aligned}$ |  |  | Overload release, adjustement range |  | $\begin{aligned} & \text { RAC240 }=200-240 \mathrm{~V} \mathrm{AC} \\ & \text { RAC130 }=100-130 \mathrm{~V} \mathrm{AC} \\ & \text { RA24 }=24 \mathrm{~V} \mathrm{AC/DC} \end{aligned}$ |  |
| Normall <br> Normall | open <br> closed | Part No. | $I_{r}$ A | Part No. | Time ranges | Complete Part No. DILM32-XTE... |
| 1N/O <br> 2N/O <br> 2N/O <br> 1N/O <br> 1N/O <br> 4N/O <br> 3N/O <br> 2N/O <br> 1N/O <br> 2N/O <br> 2N/O <br> 1N/O <br> 2N/O <br> 1N/O | 1N/C <br> 2N/C <br> 2N/C <br> 1N/C <br> 2N/C <br> 1N/C <br> 1N/C <br> 2N/C <br> 3N/C <br> 4N/C <br> 2N/C <br> 1N/C <br> 2N/C <br> 2N/C <br> 1N/C | DILM 32-XHI11 ${ }^{5}$ <br> DILM 32-XHIO2 ${ }^{5}$ <br> DILM 32-XHI22 ${ }^{5}$ <br> DILA-XHI20 <br> DILA-XHI11 <br> DILA-XHIO2 <br> DILA-XHIV11 <br> DILA-XHI40 <br> DILA-XHI31 <br> DILA-XHI22 <br> DILA-XHI13 <br> DILA-XHIO4 <br> DILA-XHIV22 <br> high version <br> DILA-XHIT20 <br> DILA-XHIT11 <br> DILA-XHITO2 <br> DILA-XHIT22 <br> side auxiliary <br> switch only for <br> DILM17, 25, 32 <br> DILM32-XHI11-S ${ }^{6}$ | 0.1-0.16 <br> 0.16-0.24 <br> 0.24-0.4 <br> 0.4-0.6 <br> 0.6-1 <br> 1-1.6 <br> 1.6-2.4 <br> 2.4-4 <br> 4-6 <br> 6-10 <br> 9-12 <br> 12-16 <br> 0.1-0.16 <br> 0.16-0.24 <br> 0.24-0.4 <br> 0.4-0.6 <br> 0.6-1 <br> 1-1.6 <br> 1.6-2.4 <br> 2.4-4 <br> 4-6 <br> 6-10 <br> 10-16 <br> 16-24 <br> 24-32 | ZB12-0,16 ZB12-0,24 ZB12-0,4 ZB12-0,6 ZB12-1 ZB12-1,6 ZB12-2,4 ZB12-4 ZB12-6 ZB12-10 ZB12-12 ZB12-16 ZB32-0,16 ZB32-0,24 ZB32-0,4 ZB32-0,6 ZB32-1 ZB32-1,6 ZB32-2,4 ZB32-4 ZB32-6 ZB32-10 ZB32-16 ZB32-24 ZB32-32 | on-delayed <br> $0.05 \mathrm{~s}-100 \mathrm{~s}$ <br> 0.05 s-100 s <br> 0.05 s-100 s <br> off-delayed <br> 0.05 s - 1 s <br> $0.5 \mathrm{~s}-10 \mathrm{~s}$ <br> $5 \mathrm{~s}-100 \mathrm{~s}$ <br> $0.05 \mathrm{~s}-1 \mathrm{~s}$ <br> $0.5 \mathrm{~s}-10 \mathrm{~s}$ <br> $5 \mathrm{~s}-100 \mathrm{~s}$ <br> $0.05 \mathrm{~s}-1 \mathrm{~s}$ <br> $0.5 \mathrm{~s}-10 \mathrm{~s}$ <br> $5 \mathrm{~s} \quad-100 \mathrm{~s}$ <br> star-delta <br> $1 \mathrm{~s}-30 \mathrm{~s}$ <br> switch over delay <br> 50 ms | E11-100 (RA24) <br> E11-100 (RAC130) <br> E11-100 (RAC240) <br> D11-1 (RA24) <br> D11-10 (RA24) <br> D11-100 (RA24) <br> D11-1 (RA130) <br> D11-10 (RA130) <br> D11-100 (RA130) <br> D11-1 (RA240) <br> D11-10 (RA240) <br> D11-100 (RA240) <br> Y20 (RA24) <br> Y20 (RAC130) <br> Y20 (RAC240) |
| 2N/O <br> 1N/O <br> - <br> 4N/O <br> 3N/O <br> 2N/O <br> 1N/O <br> 2N/O <br> 1N/O <br> 1N/O | 1N/C <br> 2N/C <br> 1N/C <br> 2N/C <br> 3N/C <br> 4N/C <br> 2N/C <br> 1N/C <br> 1N/C | DILM150-XHI20 DILM150-XHI11 <br> DILM150-XHIO2 <br> DILM150-XHI40 <br> DILM150-XHI31 <br> DILM150-XHI22 <br> DILM150-XHI13 <br> DILM150-XHI04 <br> DILM150-XHIV22 <br> DILM150-XHI11-SI <br> DILM150-XHIA11 | $\begin{array}{\|l} \hline 6-10 \\ 10-16 \\ 16-24 \\ 24-40 \\ 40-57 \\ 57-65 \\ \hline 25-35 \\ 35-50 \\ 50-70 \\ 70-100 \\ 95-125 \\ 120-142 \\ \hline \end{array}$ | ZB65-10 <br> ZB65-16 <br> ZB65-24 <br> ZB65-40 <br> ZB65-57 <br> ZB65-65 <br>  <br> ZB150-35 <br> ZB150-50 <br> ZB150-70 <br> ZB150-100 <br> ZB150-125 <br> ZB150-142 |  |  |


| Motor filter |
| :--- |
| DILM12-XMSM |
| Note: |
| The motor filter |
| can be used for contactors |
| DILM7 to DILM15. |
|  |



## Printed board contact

## DILM12-XPBC

Note:
The printed board contact can be used for contactors DILM7 to DILM15.

[^0]

## The xStart contactor series has been extended by two further current ranges

The series for contactors has been extended in 55 mm widths to 72 A and in 90 mm widths to 170 A .

With the smaller dimensions the DILM72 or the DILM170 are an attractively-priced alternative for simple switching conditions up to 37 kW and 90 kW respectively.

The known features of the xStart product series apply to the features of the new contactors: Proven quality, easy to install and low holding power on DC operated contactors are just some examples.


## New motor filter for tool-less plug connection technology

High inductive voltage peaks during switch off exceed the operating voltage by several times and as a result overload the loads.

The motor filter is simply plugged into the contactors up to 15.5 A without any complex mounting operations.

The R/C suppressor circuit attenuates the voltage peaks to a low level so that the motor is protected.


## Simple design of your own solution with tool-less plug connections

The advantages of the Moeller printed board contacts result from the simple mechanical connection between circuit boards and contactors. The board is mechanically retained on the fixing plate via clips. The printed board contact is bound in a 45 mm grid dimension. The shape of the fixing plate has the same contour as the contactor. Contactors can also be exchanged later - after a fault - without the need for soldering.

The printed board contact allows users to implement their own applications directly on the contactor.

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## Xtra Combinations

Xtra Combinations from Moeller offers a range of products and services, enabling the best possible combination options for switching, protection and control in power distribution and automation.

Using Xtra Combinations enables you to find more efficient solutions for your tasks while optimising the economic viability of your machines and systems.

It provides:
flexibility and simplicity

- great system availability
the highest level of safety

All the products can be easily combined with one another mechanically, electrically and digitally, enabling you to arrive at flexible and stylish solutions tailored to your application quickly, efficiently and cost-effectively.
The products are proven and of such excellent quality that they ensure a high level of operational continuity, allowing you to achieve optimum safety for your personnel, machinery, installations and buildings.

Thanks to our state-of-the-art logistics operation, our comprehensive dealer network and our highly motivated service personnel in 80 countries around the world, you can count on Moeller and our products every time. Challenge us! We are looking forward to it!


[^0]:    ${ }^{5}$ not for combination with DILM...-01
    ${ }^{6}$ can only be installed on left, can not be combined with top-mounting
    auxiliary contacts or mechanical interlocking

