Breaking News

Pulsteknik EMCOMP
EQUIPMENT FOR HARSH ENVIRONMENT

9 reasons to choose CBI HY-MAG circuit breakers

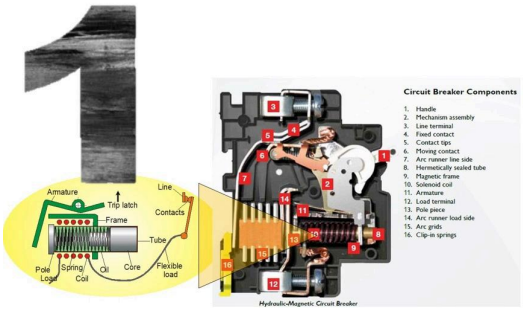
Traditional circuit breakers are based on the thermal-magnetic principle, where a bi-metal strip in combination with an electromagnet are the essential sensing devices. In a hydraulic-magnetic circuit breaker there is only one magnetic structure which responds to both overloads and short circuits.

Here are 9 reasons why you should protect your valuable equipment with CBI Hy-Mag circuit breakers:

1

Not sensitive to ambient temperatures

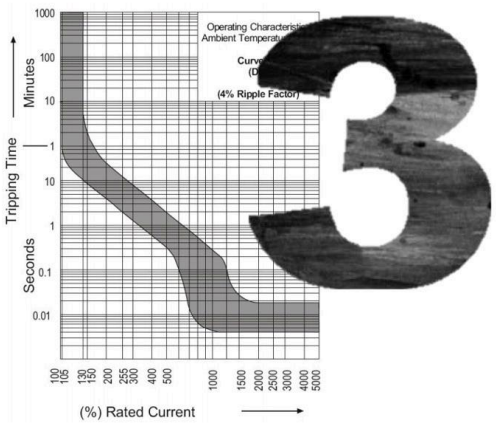
Thermal circuit breaker only works properly in room temperature. But our products keep the rated current regardless if the temperature is -40 or +85 degrees ambient. So the big advantage is that no de-rating are required.



2

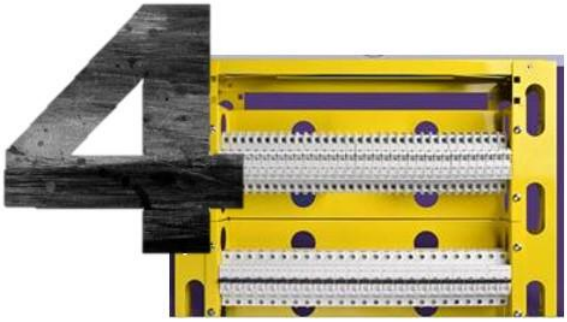
More precise protection

Hy-Mag circuit breakers do not have a bi-metal strip and works solely based on the current passing through the sensing device. This enables a more accurate tripping based on the actual current compared to thermal breakers which responds to the heat generated by the current.



Allowed to be loaded at 100% of rated current

Thermal circuit breaker you are only allowed to load continuously to 80% of the rated current (the 80% de-rating rule) while our products are rated to be loaded at 100% of the rated current.



Space saving

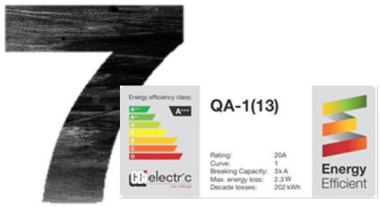
The temperature independence give us the possibility to build a thinner circuit breaker. That means that our DIN-rail mounted circuit breakers are only 13mm wide instead of the more traditional 18mm. This is more than 30% space saving in a standard 19” rack. Keep in mind that space saving is also cost saving in many cases.

Immediate re-set after tripping

When a thermal circuit breaker trips due to an overload the bi-metal strip needs to be cooled down before it can be switched on again, this is not the case for a Hy-Mag product. Your important loads can immediately be switched on again with minimal downtime.

Dedicated AC and DC products

Thermal circuit breakers are in general designed for AC but in many cases also used for DC. A DC current are more difficult to handle for a circuit breaker, since there is a risk of the arc not being extinguished properly when switching the circuit breaker. Therefore our Hy-Mag products are designed in different ranges, dedicated for DC or AC depending on your application to ensure maximum protection



Energy efficiency

It's very important to not waste energy, both from an environmental point of view as well as from a cost point of view. The bi-metal strip on a thermal circuit breaker always generate heat which means energy losses. In general, the internal resistance in a Hy-Mag circuit breaker is around 45% lower.

No aging of the sensing device, hermetically sealed

The sensing device on a thermal circuit breaker is the bi-metal strip. This will over time be exposed to air, humidity and different types of pollution that will affect the functionality over time. This is not the case for the Hy-Mag circuit breaker since the sensing mechanism is hermetically sealed.

Worldwide approvals

In general our products are certified both to the highest European industrial standard for circuit breakers, IEC 60947-2 as well as UL listed according to UL489 or UL489A.

For more information, availability or prices, please contact us

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